

For Reference

NOT TO BE TAKEN FROM THIS ROOM

For Reference

NOT TO BE TAKEN FROM THIS ROOM

Ex LIBRIS
UNIVERSITATIS
ALBERTAE NSIS



UNIVERSITY OF ALBERTA
LIBRARY

Regulations Regarding Theses and Dissertations

Typescript copies of theses and dissertations for Master's and Doctor's degrees deposited in the University of Alberta Library, as the official Copy of the Faculty of Graduate Studies, may be consulted in the Reference Reading Room only.

A second copy is on deposit in the Department under whose supervision the work was done. Some Departments are willing to loan their copy to libraries, through the inter-library loan service of the University of Alberta Library.

These theses and dissertations are to be used only with due regard to the rights of the author. Written permission of the author and of the Department must be obtained through the University of Alberta Library when extended passages are copied. When permission has been granted, acknowledgement must appear in the published work.

This thesis or dissertation has been used in accordance with the above regulations by the persons listed below. The borrowing library is obligated to secure the signature of each user.

Thesis
1969 (F)
250

THE UNIVERSITY OF ALBERTA

THE INNOVATIVENESS OF ELEMENTARY TEACHERS
AND THEIR EXPECTATIONS FOR THE
PRINCIPAL'S SUPERVISORY ROLE

by



PAUL H. THOMPSON

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA

FALL, 1969

UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "Teachers' Expectations For The Elementary School Principal's Supervisory Role" submitted by Paul H. Thompson in partial fulfilment of the requirements for the degree of Master of Education.

ABSTRACT

The general thesis of this study is that teacher expectations for the supervisory role of the principal in the improvement of instruction is related to the innovativeness of teachers. To investigate this assumption, a questionnaire that included sixty-one supervisory practices upon which the respondents were asked to express their degree of agreement or disagreement was distributed. Eight major supervisory practices were also ranked in their estimated order of importance. The quality of innovativeness was measured by teacher use of relatively new educational practices.

Statistical procedures included the use of t tests, the Mann-Whitney U test, chi square, and Kendall's Coefficient of Concordance W. Significant relationships were sought at the .05 level of confidence.

Relationships were found between the degree of innovativeness of teachers and their expectations for the principal's supervisory role on twelve practices used in supervision. Significant differences of opinion were found between the less innovative and the more innovative teachers with regard to the supervisory practices of assisting in problem identification at the teaching level, arranging group and subject level conferences, encouraging the setting up of staff agenda committees, encouraging teacher use of a variety of teaching methods, encouraging research in the

teaching area, and providing information about parental complaints. The more innovative teachers were in stronger agreement with the principal's efforts in these areas. The less innovative teachers were divided in their opinions about classroom visitation for the improvement of instruction, individual conferences after a directed visitation or a demonstration lesson, and principal encouragement of social meetings to promote cohesion.

A slight majority of the less innovative teachers tended to disagree with the practice of holding pre-school conferences for orientation purposes. But the majority of more innovative teachers tended to agree that such a pre-school conference should be held by the principal. In general, the more innovative teachers tended to either agree or disagree more strongly on items where significant differences were detected between teacher innovativeness and their expectations for the principal's supervisory role.

The ranking of two major supervisory activities in Section IV, arranging both demonstration lessons by specialists and intra-school group conferences, was related to teacher innovativeness. But much disagreement was detected upon rankings within the groups on these major supervisory practices.

This study revealed that there is a relationship between the degree of innovativeness of teachers and their expectations for the principal's role in the elementary school.

ACKNOWLEDGMENTS

The writer wishes to express his appreciation to the many individuals who cooperated and provided the assistance and support necessary to complete his program. The cooperation of the vast majority of teachers and principals in the City of Guelph is gratefully acknowledged. He wishes to thank several members of the Department of Educational Administration at the University of Alberta but particularly his advisor, Professor J. Small, for his constructive and patient guidance.

The generosity and foresight of the Guelph District Board of Education for the financial assistance and the establishment of a progressive educational policy toward graduate education for its teacher personnel is duly recognized.

The assistance of Mrs. B. Kitagawa has contributed greatly to the early completion of this project. To my wife, Marjorie, and to Margot and John go a special note of thanks for their patience, understanding and moral support without which this goal could not have been achieved.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION TO THE STUDY	1
Purpose of the Study	4
References for Chapter I	6
II. REVIEW OF LITERATURE AND RESEARCH FINDINGS	
ON SUPERVISION OF INSTRUCTION	7
Introduction	7
The Teacher-Supervisor Relationship	7
The Nature of Supervision	7
The Functions of Supervision	8
History of Supervision	11
Teacher Attitudes Toward Current	
Practices	13
Principal Attitudes Toward Super-	
vision	17
Perception and Supervision	17
Conclusions	18
References for Chapter II	20
III. REVIEW OF THE LITERATURE AND RESEARCH	
FINDINGS ON INNOVATION	23
Change In The Educational	
Environment	23
Introduction	23
The Process of Change	24
Change at the Classroom Level	27

CHAPTER	PAGE
The Change-agent	27
Strategies for Change	31
Conclusions	34
Summary of the Related Literature	35
References for Chapter III.	37
IV. DISCUSSION AND DEFINITION OF THE	
PROBLEM	40
The Problem	40
Statement of the Problem	41
Sub-Problem	42
Hypotheses	42
Assumptions	42
Definitions of Terms	43
Delimitations of the Study	44
Significance of the Study	45
Overview of the Study	46
V. RESEARCH DESIGN AND METHODOLOGY	48
Introduction	48
Source of Data	48
Instrumentation	50
Grouping Practices	54
Overview of the Analysis	55
References for Chapter V.	57
VI. ANALYSIS OF THE DATA	58
Introduction	58

CHAPTER	PAGE
Distribution of Instructional	
Innovativeness Ratios	59
Item Analysis of Teacher Expectations for	
the Principal's Supervisory Role	62
Teaching Area Visitation	66
Individual Conferences	66
General Staff Meetings	69
Action Research	70
Miscellaneous	71
Summary	72
Teacher Estimated Rankings For The Major	
Areas of Supervisory Activity By The	
Principal	74
Summary	80
Related Areas of Concern Expressed By	
The Teachers	80
Summary of Chapter VI.	85
VII. DISCUSSION OF THE FINDINGS	87
Introduction	87
Areas of Significant Differences in	
Direction of Agreement	88
Areas of Significant Differences and	
Non-Agreement	92
Other Implications	94
Conclusions	98
Summary of Discussion	100

CHAPTER	PAGE
VIII. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS . . .	102
Summary of the Study	102
Introduction	102
Summary of the Findings	105
Hypothesis I	105
Statistical Finding	105
Comments	105
Hypothesis II	106
Statistical Finding	106
Comments	106
Conclusions and Recommendations	107
Conclusions	107
Recommendations	108
Suggestions For Further Study	110
BIBLIOGRAPHY	111
APPENDICES	118
Appendix A ₁ : Letter to the Superintendent.	119
Appendix A ₂ : Sample Letter re Questionnaire	120
Appendix A ₃ : Letter to the Principals	121
Appendix A ₄ : Letter to the Teachers	122
Appendix B : The Instrument	123
Appendix C : Computer Analysis (<u>t</u> tests)	134
Appendix D : Summary of Rank Orders (Section V)	138

LIST OF TABLES

TABLE	PAGE
I. Teacher Distribution by Teaching Experience	51
II. Teacher Distribution by Teaching Qualifications	51
III. Teacher Distribution By Grade Level	52
IV. Summary of Responses to Questionnaire	52
V. Distribution of Instructional Innovativeness Ratios	60
VI. Distribution of Teacher Groups by Innovativeness	61
VII. Summary of Significant Differences Between Groups	64
VIII. Number and Percentages of Significant Items by Sections	65
IX. Percentage Summary of Group Responses	68
X. Summary of Ranks Assigned by Teacher Groups	76
XI. Summary of Mann-Whitney <u>U</u> 's and Normal Deviates	78
XII. Degree of Agreement Within Groups	79
XIII. Percentage Comparisons of Ideas Expressed By Groups	82
XIV. Percentage Comparisons of Frequency of Expressions	84

LIST OF FIGURES

FIGURE	PAGE
1. A Paradigm of the Functional Relationship Between Teacher Expectations and the Principal's Supervisory Activities	5
2. Innovators As the First 2.5 Per Cent to Adopt a New Idea	25
3. Continuum of Leadership Behaviour	30
4. A Composite Model for a Strategy for Planned Change	33

CHAPTER I

INTRODUCTION TO THE STUDY

Educational systems and personnel exist amid great pressures from various sources for change and improvement. According to Hobbs, "the principal forces for change in education" are external to local educational systems. Locally based internal forces tend to maintain stability and consequently, "educators are primarily reacting to change-inducing forces instead of using these forces to bring about change" (4:1-2). Wiens states that "schools [and therefore personnel] exist in a changing environment, and they must be prepared to make the necessary adaptations if they are to function effectively in preparing young people for the world of tomorrow" (8:13). These changes in the environment are most prolific, producing many new "technological developments outside the school, particularly developments in transportation and communication" (4:20,21). Lindman says, "It is useful to think of the demand for change as coming basically from three sources . . . new expectations . . . new knowledge . . . new hardware" (5:306).

If schools are going to do more than mirror their environment, the educational personnel must lead in the unique development and utilization of modern technology. Trump claims:

Changes are especially urgent because schools must provide education for vastly increased numbers of persons, for longer spans of productive life, at far higher levels of understanding, competence, and skill - and always with the goal of strengthening our democratic way of life (6:4).

Yet, other writers do not stress the importance of change. Curtin writes:

Educational fads have come and gone. There have been various plans proposed and practised. None of these has ever been a satisfactory substitute for a good teacher with a reasonably sized class (2:7).

However, there is some indication in the literature that educational change has become more acceptable.

Adelson adds, "Responsible innovation must become a way of life in education, and we must build the organizational and institutional apparatus to make it so" (1:253).

The increasing national concern over education, in the midst of attempts to innovate and improve public education may reflect both public and professional opinion. Curtin states:

Indifferent school programs no longer result in public indifference, but rather in public hostility. This change in the public's attitude is also being felt in today's supervision (2:9).

Supervision in education begins to take on greater significance as the demand for educational innovations and greater quality in performance is brought forward by the public. Curtin views the quality of instruction as a "shared" function involving the teacher and supervisory personnel working together for the common good (2:11).

Curtin also suggests:

Perhaps the most significant way to view supervisory behavior is through the eyes of the teacher. Unfortunately, little work has been done to determine the specific reactions of teachers to various types of supervisory behaviors (2:29).

The concept of involvement becomes more important in this study. It is supported by Gwynn and numerous other authors as a valuable device both in supervision and in the development of innovative practices among educational personnel. Gwynn writes, "One approach to a determination of these factors is to find out what teachers themselves consider to be the job of the supervisor" (3:23-24).

Yet, there is very little evidence to indicate the relationship between the innovativeness of teachers and the supervisory activities of principals. Assuming that the kind of activities practised by the principal do affect teacher behavior, which of the activities contribute to the innovativeness of teachers? Which supervisory activities are preferred by the more innovative teachers and by the less innovative teachers?

The relationship between principals' supervisory activities and the innovativeness of teachers is complex. The supervisory activities may produce a wide variety of responses among all teachers. If this view is accepted, then teacher preferences for supervisory activities cannot be determined by any single study. But a variety of studies focused upon the relationship between teachers and principals can contribute toward greater knowledge in this area.

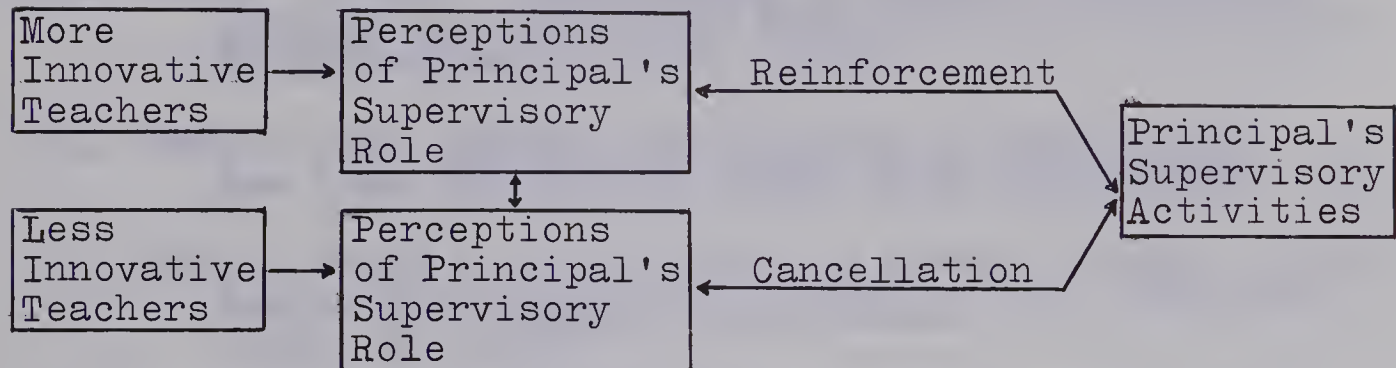
Purpose of the Study

This study focuses upon the expectations of elementary school teachers for the supervisory activities of the principal. In addition, discrimination between the expectations of more innovative teachers and the expectations of less innovative teachers for the principal's supervisory role will be attempted. If differences are found between the expectations of more innovative and less innovative teachers, then some indication may be gleaned that will be functional in the encouragement of innovative behavior and the guidance of more effective supervision.

As indicated in Figure 1, teacher perceptions and expectations may vary for the practice of principal supervision. More innovative teachers may perceive the supervisory role differently from teachers who are less innovative. Knowledge of the expectations held by the more innovative teachers may encourage the principal to structure his supervisory practices more accurately for reinforcement of the expectations that are desirable to develop a more innovative staff. By the same reasoning, the principal may act to cancel or negate other perceptions of less innovative teachers.

FIGURE 1

A PARADIGM OF THE FUNCTIONAL RELATIONSHIP
BETWEEN TEACHER EXPECTATIONS AND THE
PRINCIPAL'S SUPERVISORY ACTIVITIES



In general, through increased knowledge of teacher expectations, the principal can plan more accurately to influence specific teachers and facilitate teacher activities at the school and classroom levels. Findings from this study may indicate certain methods of supervision or attitudes toward supervision that will be helpful in the support, influence and in-service education of the less innovative teacher.

REFERENCES FOR CHAPTER I

1. Adelson, Marvin. "Educational Ends and Innovational Means," Inventing Education for the Future, W. Hirsch and Colleagues (eds.), San Francisco: Chandler Publishing Co., 1967, pp. 240-251.
2. Curtin, James. Supervision in Today's Elementary Schools. New York: The Macmillan Co., and London: Collier-Macmillan Ltd., 1964.
3. Gwynn, J.M. Theory and Practice of Supervision. New York and Toronto: Dodd, Mead and Company, 1961.
4. Hobbs, Daryl J. "The Need for Planned Change in Rural Sociology," Theory Into Practice, 5:1 (February, 1966) pp. 20-24.
5. Lindman, Erick L. "The School Administrator and Educational Innovation," Inventing Education For The Future. W. Hirsch and Colleagues (eds.), San Francisco: Chandler Publishing Company, 1967, pp. 305-312.
6. Trump, J. and D. Baynham. Focus On Change: Guide To Better Schools, Chicago: Rand McNally and Co., 1961.
7. Wiens, John. "Attitudes, Influence and Innovativeness: An Analysis of Factors Related to Innovativeness in Educational Organizations, Unpublished Doctoral dissertation, University of Alberta, Edmonton, 1967.
8. _____. "Change and the Classroom Teacher," The Canadian Administrator, 7:4 (January, 1968), pp. 13-16.

CHAPTER II

REVIEW OF LITERATURE AND RESEARCH FINDINGS ON SUPERVISION OF INSTRUCTION

Introduction

A general overview of the related material on supervision of instruction indicates a complex process involving personnel and environmental factors both internal and external to the educational institution. These forces work to change and develop the efforts of educators toward quality learning situations at the classroom level. To date, supervision of the school program and persons has been undertaken at the initiative of the school principal and other specialists. But more planning and cooperative action between the principal and the teachers are required to meet the needs of the teacher and to create common educational goals.

This chapter will focus upon those aspects of supervision which involve the teacher-supervisor relationship. However, since the staff and the school supervisor may not always be change-oriented, the process of innovation and other related concepts will also be reviewed in Chapter III.

I. THE TEACHER-SUPERVISOR RELATIONSHIP

The Nature of Supervision

Supervision is often concerned with values in the development of educational objectives and methods. It is

scientific as it utilizes sound methods of analysis and objective techniques (13:407). Supervision of instruction can be dynamic and democratic respecting personal values and working to develop human potential (11:1). Supervision of staff becomes more effective with mutual interaction between persons. And Wiles notes that supervision can be spontaneous whenever teachers get together to discuss common problems and courses of action (31:1445).

Accordingly, the people involved and the objectives sought largely determine the nature of supervision. It is unique to the situation. But the commonly accepted plan is to have the school principal, in a general capacity, working in conjunction with the teaching staff for the improvement of instruction. The principal or any member of the group may then call upon specialists to assist them. Ideally, the goals of this team should arise from the self-determined needs of the group members and become the framework for the supervisory activities that are undertaken by the staff.

The Function of Supervision

Improvement of instruction is generally accepted as the primary goal of supervision. Also, supervisory goals related to the needs of teachers are developed to encourage teacher growth and to optimize the potential of the educational system. These goals can be achieved by responsible staffing, motivating and stimulating teachers, consultation among the persons on staff, and program

development activities. Responsible staffing is an effective means of improving instruction as it is related to selection, placement and retention of well-qualified teachers. Motivating and stimulating teachers supplements staffing and requires skill, understanding and ingenuity from the supervisor. Working closely together through formal and informal consultation, the supervisor is more able to provide for teacher growth. This growth depends upon both the nature of the problems and the individuals, however. Enns claims that the best teaching usually occurs where good programs have been developed, and that variation in the program is a catalyst and stimulant in a controlled environment such as the educational organization. Enns also notes that some supervisors may perform these functions better than others (7:28-30). It appears that the complex nature of supervisory functions demands a special kind of administrator.

Robinson emphasizes the teacher growth aspect of the supervisory functions which he maintains is the essence of supervision (25:58-60). In this respect, one of the most contentious supervisory issues focuses upon appraisal or evaluation of effective teaching.

Before appraisal can be effective, good teaching must be defined in operational and behavioral terms, observations and recording devices must be developed, and evaluation of the evidence collected must be determined (3:119-120). Although there are several acceptable procedures for dealing with this complex problem, emphasis is placed upon continued

research to improve teacher appraisal. The school principal and the other supervisors are jointly held responsible for teacher evaluation but the trend is toward teacher involvement in the process. Facilitation of teacher appraisal is possible by cooperative development of a carefully planned process of appraisal acceptable to the teacher and to the principal or supervisor (28:3-67). If conflict between the supervisor and the teachers is to be minimized or constructively oriented, then functional cooperation among these persons is essential. However, the school supervisor is central to the evaluation of teacher performance and he must fulfill the role under present conditions.

Many dysfunctional consequences of evaluation and appraisal can be minimized. But it is the appraisal of teaching for other than developmental purposes to which teachers object. So teachers and administrators must work together to plan the program, decide upon implementation, and cooperate regularly in the appraisal of the program (3:117). Andrews states that the formal evaluation of teachers by resident supervisors should be discouraged whenever possible (2:8).

So a comprehensive goal of the supervisor in meeting the expectations of teachers and other groups, is to integrate and balance the supervisory functions which provide for maximum growth, job satisfaction, and efficiency within the staff.

History of Supervision

The evolution of educational supervision has been a long, slow process. Individual and group member stimulation toward common goals is an old idea. Recent history emphasizes several distinct but overlapping developments from the era of job analysis to the present view of the teacher as a member of the educational institution with the right to expect job satisfaction and consideration. Briefly, the scientific management approach of the late nineteenth century showed that many jobs could be done more effectively and that management could be studied scientifically. The supervisor performed as an overseer of proper work functions. This approach largely ignored the persons involved until the early twentieth century. The famous "Hawthorne Studies" and many others produced empirical data to show that the human elements were more important than the mechanics of the work situation as far as productivity was concerned. The efficiency of persons was linked to job satisfaction and involvement. Then an inter-disciplinary approach involving political science, economics, psychology and sociology was developed to study the behavior of people within the organization (3:68-75).

Hooze has traced educational supervision through the stages of responsibilities vested in lay-trustees, non-resident supervisors such as superintendents and inspectors, and resident supervisors such as the principal. He concludes that the modern trend is toward making supervision

of instruction the main task of the elementary school principal (14:7-8).

The modern trend has also been toward making general supervision of instruction the task of the principal, supported by non-resident specialists. They help the principal to identify and encourage constructive approaches to instructional improvement. Then, working together, they search for more promising educational practices. The supervisory style of the principal should develop warm interpersonal relationships (32:4) and promote staff involvement (1:4). For these and other purposes, Harris discusses several common supervisory methods. These include inter-visitation, non-directive approaches by motivation and stimulation, and in-service programs involving shared responsibilities, outside resources, and strong local leadership (12:510-540). MacKay reminds the reader that the in-service activities must recognize the staff's own needs and provide for participation by the staff in the planning, development and evaluation of the program. It is most important that the principal should recognize the importance of his role in in-service education. He must motivate his staff and be involved with them in each phase of the in-service program (38:73-74).

The growing specialization of teachers and the accompanying demand for classroom autonomy suggest that some supervisory functions may be most beneficially developed from within the staff. If this trend is maintained, a

cohesive working staff with the supervisor as a member of the group, may evolve.

Such professional growth and autonomy of individuals will require less supervision as we understand the term. Trump and Baynham provide some insight into the future of educational supervision. They maintain:

The success of the school of the future . . . will depend to a significant degree on the selection, assignment, coordination, and in-service training of staff members (30:66).

Teacher Attitudes Toward Current Practices

The most dramatic demand of teachers is towards autonomy in the classroom or teaching area. This movement is related to improved teacher education and a drive for professional status among teachers who are not willing to accept their responsible role - without the power to make relevant decisions at the classroom level. Becker's study in the Chicago public schools indicated that teachers are strongly concerned with classroom autonomy and professionalism, and that the principal, as a supervisor, should recognize the teacher's need for independence (10:243-249). Lortie found that teachers preferred colleagues, university professors, and subject matter specialists for help with classroom problems (9:17). McGillivray concluded that beginning teachers apparently turn to fellow teachers and department heads for any assistance (23:147). Indeed, Trask found that only nine percent of the principals perceived teachers to hold positive attitudes toward

supervision and that principals were loathe to intervene in the classroom except in serious instances (29:2). According to Lane and his associates, the conflict between increasing professionalism and bureaucratic controls has become increasingly intolerable (18:403-409).

Teacher reactions to instructional supervision tend to be negative unless the supervisor is accepted because of special competence in the problem area. Then the teachers will call upon the supervisor for consultation. Professional development activities can be undertaken as a small group or staff enterprise. Hooze found that teachers endorsed the consultant-performed demonstration lesson and they felt that intra-school and inter-school visits were most useful (14:iv-vi). Hrynyk found curriculum development, testing and evaluation of pupils, and in-service activities that promote competence, leadership and job satisfaction were among the most desirable supervisory services (15:115-117). Finally, a recent study by Winestead found similarities in the ranking of the most important areas of instructional supervision. Principals and teachers generally agreed that areas of most importance, such as curriculum development and provision for individual differences, involved pupils. Teacher-oriented activities such as faculty meetings and in-service education were ranked lower by both teachers and principals (17:57).

In-service education has assumed major proportions under present supervisory practices. Although this activity related to travel, reading, and studying is widely accepted

and encouraged by teachers, formal presentations by persons in positions of authority tend to produce teacher apathy. Clarke has shown that acceptance of the in-service program and any intended change is more likely to occur if it is presented by a prestige figure and endorsed by the teacher group (5:9-15). The school supervisor is now in a crucial position to influence decisions concerning teacher involvement in the total process of in-service education.

Because of his proximity to the teaching situation, the resident supervisor may be able to stimulate and assist the more apathetic teachers to become involved in developmental activities. The principal's special knowledge of all staff members permits him to perceive and discriminate among the needs of individuals so that he can encourage the more competent teachers to perform leadership roles while he can involve other teachers in developmental tasks. This facilitating function is most important to avoid interference with the autonomy and need for independence of the more professionally-oriented teachers.

Organizational innovations may be providing some solutions for the dilemma of effective supervision at the school level. Team teaching provides a useful technique as the group experience, the common goals, and mutual evaluation of peers becomes developmental in nature. Principal and specialist involvement in group teaching activities promotes close relationships with improvement of instruction and learning as major goals. Also, Shaplin maintains that

general upgrading of the team is encouraged by the group interaction and this natural evaluation from within the group seems to benefit all members (27:96).

Finally, lack of effective communication with teachers and between hierarchical levels may be partially responsible for the development of negative attitudes. As indicated earlier, teachers normally turn to colleagues for assistance rather than to the supervisor. Yet MacKinnon concludes from his study that effective supervision must accommodate clear and complete communication between the supervisor and the teacher (21:20). Various forms of two-way communication including informal contacts, use of mechanical devices, and written exchanges, permit discussion and interaction between individual and positional levels. The "principal occupies a key role in the school communications network" (16:38). It can be concluded that effective communication among positional levels in education is integral to unity of action and effective educational programs.

If teacher attitudes toward supervisory practices continue to be negative, the improvement of instruction may be needlessly impeded. Accordingly, research findings can provide some insight into the development of more desirable supervisory relations between the teacher and the school supervisor.

Principal Attitudes Toward Supervision

Curtin cites a study by Benjamin which concluded that supervision is a "set of attitudes that one person holds toward others" (6:29). Although the principals' attitudes toward supervision vary, they do generally consider the improvement of instruction to be a primary responsibility (22:97). Yet Malmberg (1959), Ziolkowski (1965), and Seymore (1967) found that principals spent very little time in actual supervision of instruction. Trask reports that principals resolve the dilemma of conflicting supervisory expectations by supervision through advising and suggesting, differentiating advice according to the individual advisee, and redefining the activities thereby partially fulfilling the conflicting expectations of their role (29:3-4).

The theme of constant help, support, and participation in the learning situation persists throughout the related literature indicating that the resident supervisor does play an important role in school supervision. If the function of evaluation is added to the other expectations of the leadership role, conflict seems to be inevitable. Yet many principals and teachers continue to cope with just such an ambivalent situation.

Perception and Supervision

Cheal (1964), Morin (1964), and Hooge (1967) have presented detailed discussions of expectations for supervisory behavior. Cheal concludes that perception is an important determiner of the principal's behavior (4:78);

Hooge maintains that accurate perception of group and individual expectations minimizes dysfunctional consequences (14:17-23), and Morin uses the well-known Getzel and Guba's Model of Major Dimensions of Social Behavior to illustrate that behavior is a product of interaction between the nomothetic and idiographic dimensions of social interaction in any particular situation. He concludes that the supervisor's perception of his role in the situation helps to determine his behavior (24:11-24). Citing Bruner, Costello and Zalkind, Enns points out that perception of others is a highly individualized process related to the characteristics of the persons involved and the situation in which perception occurs. He concludes that accurate perception and understanding of the social situation increases the administrator's leadership ability (8:26).

In summary, if the supervisor perceives things accurately, then there is more chance that his role behavior will be acceptable. Thus the importance of understanding the various expectations held by teachers for supervisory behavior is abundantly clear.

II. CONCLUSIONS

Supervision at the school level is changing and there is a need for clarification and redefinition of roles, functions, and goals of the supervisor. These aspects of supervision must be determined at the school level in cooperation with the teacher as the key person in instructional improvement.

Since conflicting expectations and goals cause some dysfunction within an organization, experimentation and adjustment according to the interests and needs of the teachers is mandatory. Some redefinition of supervision has occurred, advisory functions have been stressed, and supervision has been accepted as desirable when the supervisor is qualified to assist. Recent articles have emphasized the support and motivating functions of the resident supervisor and evaluation-developmental functions from within the group in answer to perceived needs. Simultaneously, the supervisory program has become more flexible and professionally-oriented. Shared functions and responsibilities have been shown to contribute toward greater unity of teacher effort and professional growth.

Changing teacher expectations create difficulties for the school supervisor. Continuous delineation of their new expectations is necessary to provide effective supervision in a dynamic environment.

REFERENCES FOR CHAPTER II

1. Anderson, B.D. and A.F. Brown. "Who's A Good Principal?" The Canadian Administrator, 6:3 (December, 1966), pp. 240-251.
2. Andrews, J.H.M. "Who Shall Supervise?" Lecture delivered at CEA. Short Course, Banff, Alberta, May, 1960 (Mimeographed).
3. Campbell, R., J. Corbally and J. Ramseyer. Introduction to Educational Administration. Second edition, Boston: Allyn and Bacon, Inc., 1963.
4. Cheal, John E. "Role Conflict in the Principalship of The Composite High School," Unpublished Master's thesis, University of Alberta, Edmonton, 1958.
5. Clarke, S.C.T. "The Psychology of Change," Inservice Education for Teachers. Ingram and Hrynyk (eds.), Improvement of Instructional Series No. 6, The Alberta Teachers' Association, Barnett House, Edmonton, Alberta (August, 1963), pp. 9-15.
6. Curtin, James. Supervision in Today's Elementary Schools. New York: The Macmillan Co., and Collier-Macmillan Ltd., London: 1964.
7. Enns, F. "Supervision: A Rationale." The Canadian Administrator, 2:7 (April, 1963), pp. 27-30.
8. _____. "Perception in the Study of Administration," The Canadian Administrator, 5:6 (March, 1966), pp. 23-26.
9. Erickson, D.A. "The Principalship and the Principal: From Cubberley to the Computer," Program and Personnel, The Alberta Principals Leadership Course, E. Miklos (ed.), 1965, pp. 1-13.
10. Etzioni, A. Complex Organizations: A Sociological Reader. New York: Holt, Rinehart and Winston, 1964.
11. Evans, N. and R. Neagley, Handbook for Effective Supervision of Instruction. Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1964.
12. Harris, Ben M. Supervisory Behavior in Education. Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1963.

13. Hicks, Hanne J. Educational Supervision in Principle and Practice. New York: The Ronald Press Co., 1960.
14. Hooge, H.H. "The Role of the Elementary School Principal in British Columbia," Unpublished Master's thesis, University of Alberta, Edmonton, 1967.
15. Hyrnyk, N.P. "Correlates of Professional Role Orientation in Teaching," Unpublished Doctoral dissertation, University of Alberta, Edmonton, 1966.
16. Ingram, E.J. "The Process of Change," The C.S.A. Bulletin, 5:33-51 (May, 1966), pp. 33-51.
17. Keeping Abreast In Research," Phi Delta Kappan, 49:1 (September, 1967) p. 57.
18. Lane, W.R., Ronald Corwin, and William Monahan. Foundations of Educational Administration: A Behavioral Analysis. New York: The Macmillan Company, 1967.
19. MacKay, D.A. "The Principalship: A Pivotal Role In Communications," The Alberta Principals' Leadership Course, F. Enns (ed.), 1963, pp. 31-38.
20. _____. "Inservice Education - A Strategy for Staff Development," The Alberta Principals' Leadership Course, F. Enns (ed.), 1964, pp. 65-74.
21. MacKinnon, A.R. "Towards More Effective Communication in Supervision," The Canadian Administrator, F. Enns, (ed.), 2:5 (February, 1963), pp. 17-20.
22. Malmberg, H. "The Principal as a Supervisor of Instruction in the Regional School Districts of New Brunswick," Unpublished Master's thesis, The University of Alberta, Edmonton, 1959.
23. McGillivray, W.R. "A Survey of Supervisory Assistance as Perceived by Beginning Teachers in Selected Urban High Schools in Ontario," Unpublished Master's thesis, The University of Alberta, Edmonton, 1966.
24. Morin, L.H. "The Principal's Perception of His Role," Unpublished Master's thesis, The University of Alberta, Edmonton, 1964.
25. Robinson, N. "Principal and Teacher Supervisory Relationships: Problems and Perspectives." E. Miklos (ed.) The Alberta School Principal, 1965, pp. 55-60.
26. Seymore, H.C. "The Principal as the Instructional Leader," N.A.S.S.P. Bulletin, 51:89-97 (November, 1967).

27. Shaplin, J.T. and H.F. Olds. Team Teaching. New York: Harper and Row Publishers, 1964.
28. "Teacher Evaluation," The National Elementary School Principal, 43:2 (November, 1963), pp. 3-67.
29. Trask, Anne. "Principals, Teachers and Supervision: Dilemmas and Solutions," The Administrator's Notebook, 13:4 (December, 1964), pp. 1-4.
30. Trump, J. and D. Baynham. Focus On Change: Guide To Better Schools, Chicago: Rand McNally and Co., 1961.
31. Wiles, K. "Supervision," Encyclopedia of Educational Research. New York: Macmillan Company, 1960, pp. 1445-1447.
32. Ziolkowski, E.H. "Practices In the Supervision of Instruction," The Canadian Administrator, 5:1 (October, 1965), pp. 1-4.

CHAPTER III

REVIEW OF THE LITERATURE AND RESEARCH FINDINGS ON INNOVATION

I. CHANGE IN THE EDUCATIONAL ENVIRONMENT

Introduction

Although current literature reflects a healthy public attitude toward change, the teacher is still constrained by his environment and the failure of educational institutions to provide procedures for teacher participation in the innovative process (18:43). Traditional supervision has failed to stimulate sufficient teacher growth and experimentation but recent trends toward egalitarian, participative techniques may hold greater promise. Because the resident supervisor has close contact with teachers, pupils and community forces, he can exert great influence upon the school environment (7:23). Swearingen believes the supervisor can facilitate the introduction of change (22:63).

Changes occur in various ways within the school organization. Although changing people is a necessary part of innovation, Hansen maintains that this cannot occur effectively without concurrent changes in the structure in which they work (9:109). The process of change and the role of the change agent must be understood if the development of an environment conducive to innovation is to occur.

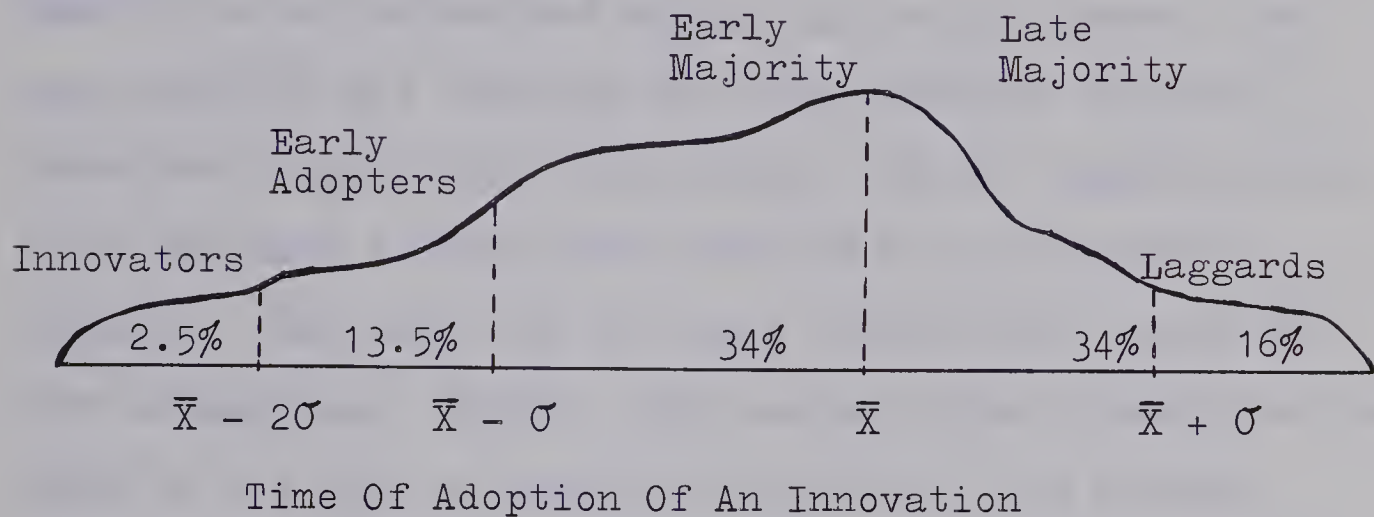
The Process of Change

Change within an organization is largely dependent upon the unique characteristics of individual members and upon the environment which may encourage or impede change. Rogers has shown that the change process has several distinct phases leading to adoption or rejection of change by the individual. These stages are based upon the degree of identification and the individual's perception of the situation. They proceed from the awareness stage through interest and evaluation to the trial and adoption stages (21:304-306). Information sources at the early stages of the adoption process are usually the far-reaching mass media. But for the process to advance beyond the interest stage, more direct communication may be necessary. This communication can be supplied by the change-agent who therefore plays an important role in the process of change and the response of individuals to innovative forces (24:23-27).

Rogers states that the rate of adoption of an innovation resembles a normal distribution over time (19:56). He also indicates that the position of the innovator according to the time of adoption can be located beyond two standard deviations from the mean in a normal adoption curve. The "early adopters," "early majority," and the "late majority" can be located along the continuum to the "laggards" who represent a larger proportion of the normal distribution as shown in Figure 2.

FIGURE 2

INNOVATORS AS THE FIRST 2.5 PER CENT
TO ADOPT A NEW IDEA



Source: E.M. Rogers, "What Are Innovators Like?" Change Processes In The Public Schools, (Carlson et al., editors), Centre for the Advanced Study of Educational Administration. University of Oregon, Eugene, Oregon, p.56.

A brief description of the innovator presents an interesting but complex picture.

Innovators are venturesome individuals; they desire the hazardous, the rash, the avant-garde, and the risky. Since no other model of the innovation exists in the social system, they must also have the ability to understand and use complex technical information. An occasional debacle when one of the new ideas adopted proves to be unsuccessful does not disquiet innovators. However, in order to absorb the loss of an unprofitable innovation, they must generally have control of substantial financial resources.

Their propensity to venturesomeness brings them out of their local circle of peers and into more cosmopolite social relationships. Even when the geographical distance between them may be considerable . . . (21:57).

Although cosmopolitanism is a strong characteristic of the innovator, it must be noted that these adopter categories describe ideal types of adopters and great variation will occur within each. Early adopters tend to be respected members of the local system, the early majority tend to be deliberate and enjoy high social status, the late majority are cautious and adopt because of social pressures outside their peer group, and the laggards tend to be the last to adopt and have few or no cosmopolite contacts. But there are no sharp distinctions among the five categories. Rather, they are arbitrary classifications based on the time of adoption relative to one another (24:27-30).

Using Rogers' adoption scale theory, it is possible to classify individuals according to the time at which they adopt an innovation. Rogers indicates that focusing upon the number of innovations adopted at one point in time provides a rough estimate of the time of adoption (20:352). It is reasonable to assume that an innovator, who is usually the first to adopt a new practice, will also make greater use of a number of relatively new ideas and methods. On the other hand, the laggard, who may adopt at some later time, will tend to avoid the use of most new practices.

Many researchers have made use of adoption scales to measure innovativeness in terms of both the time of adoption and the number of adoptions. Lionberger points out that adopter scales permit classification for the purpose of

comparison (14:108). And Ingram supports the use of Rogers' "adoption process" theory in educational studies noting that the theory is based upon hundreds of studies of innovation in agriculture, medicine, and education (13:38).

Change at the Classroom Level

Yakimishyn cites studies by Brickell, Ingram, and the National Educational Association which indicate that innovations of instructional consequence occur at the instructional level (24:16-18). Yet teachers are limited by group and informal influences when they attempt to innovate (16:410). To partially compensate for this difficulty, Pellegrin declares that the staff should be actively involved from the earliest stages of innovation (18:45).

Although the principal can link the classroom with external agents for change and allocate resources at the school level to facilitate change, he is not usually considered to be a successful change-agent. Indeed, educational innovations seem likely to fail unless senior administrators beyond the local school environment play a large role in the process of change (18:3).

The Change-agent

The superintendent is expected to be the most important individual in the introduction of change and he does frequently introduce innovations. Yet Ingram maintains that the "absence" of a change-agent remains a

chief barrier to educational change (12:44). If a change-agent provides the stimulus for change and gets things started, if his efforts are reflected in the rate of adoption of innovations, then the principal can be considered to be a school change-agent when he supports and takes up the challenge of innovation from the superintendent (19:25). Since a principal does have knowledge of his staff, he can publicly demonstrate his support for new classroom practices and teacher growth. In this way, he can develop a more innovative staff (4:275).

Because of the many implications of any proposed change in education, value judgements may predominate in decision-making. However, an objective approach and careful analysis of the situation based upon social science knowledge should be a primary goal of the change-agent (1:407). Also, since change is more likely to accompany a new man from outside the system, Ingram encourages the importation of change-agents (12:45).

The success of an administrator as an agent for change depends largely upon his characteristics and style of leadership. Fisher concludes that the "initiating structure" and "consideration" factors of observed behavior are extremely important. He utilizes Tannenbaum and Schmidt's model for leadership behavior to illustrate the flexibility of authority and freedom dimensions as these may be applied to an area where action is desirable (6:14-16).

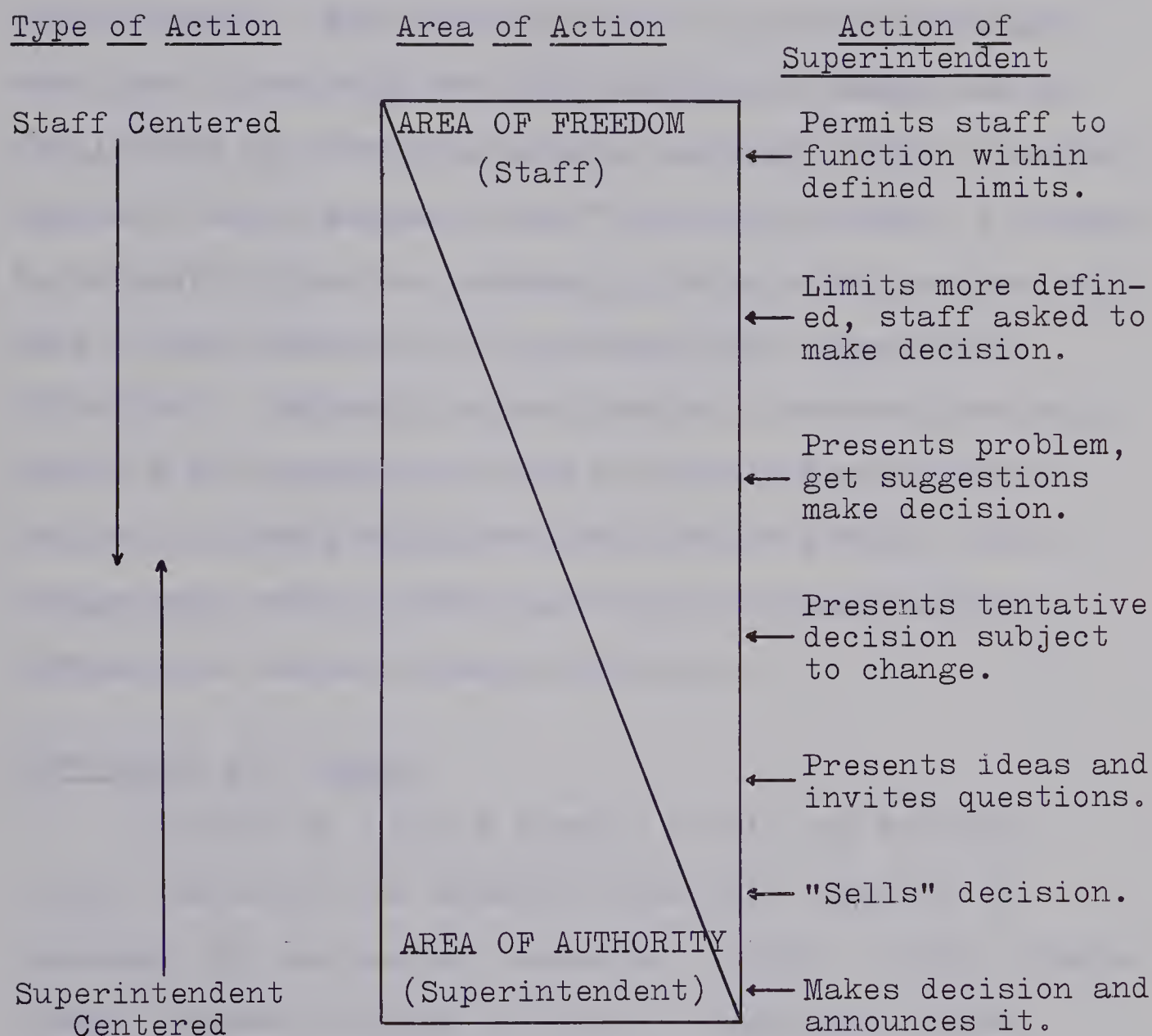
As indicated on the "Continuum of Leadership

Behaviour " in Figure 3, the superintendent may be the change-agent who actually decides to introduce change. He may announce his edict or attempt to convince the staff of its value. On the other hand, he may permit greater freedom by encouraging the staff to experiment with their own ideas "within defined limits." This freedom approach may be interpreted as "consideration" on the superintendent's part while less freedom may be considered coercive in nature. Greater authority may create superintendent-centered activity while greater freedom may result in staff-centered activity. Both dimensions operate on a continuum however, providing for a balance of authority and freedom in leadership behavior. As indicated in the diagram, a certain amount of responsibility for action must rest either with the superintendent or the teachers. As the superintendent relaxes his authority, the initiative passes to the teachers permitting self-direction and autonomy. Such a concept may also operate at the school level when the change has been introduced at the system level by the superintendent.

Analysis of the formal educational organization may convince the change-agent to implement a temporary system. Temporary systems are created to make corrections in existing structures, to re-educate, or to educate in the additive sense. They are short term organizations to permit observation of experimental change. Such systems accomplish many changes in persons and their social relationships which an educational change-agent might

FIGURE 3

CONTINUUM OF LEADERSHIP BEHAVIOUR



Source: H.K. Fisher, Implementing Innovation: The Challenge for Supervision, C.E.A. Short Course, Banff, Alberta, June, 1966, p.16.

otherwise find impossible. Teachers and supervisors may learn that working together can be a valuable experience in growth and outlook. The staff and the community will find that temporary systems reduce the risk of rejection of valid changes. Experimentation with innovation becomes much less threatening and the planning of change can be facilitated by permitting greater autonomy within temporary systems. Miles suggests that "the only constant is change." So we must utilize one temporary system after another as a part of the structure of the educational organization (21:485-6). Pellegrin agrees that such systems provide a "vehicle for innovation" that encourages deviation and originality among organizational members (18:37). The change-agent must be familiar with such constructive systems that may encourage innovation.

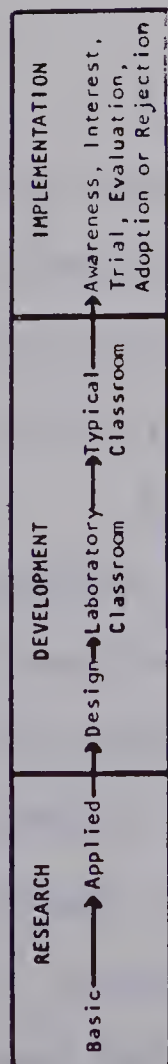
Strategies for Change

Studies by Fox and Lippitt (1964) and Brickell (1964) indicated that elaborate help for teachers is necessary for successful innovation (23:54). Since general change programs include in-service education, outside consultation, diffusion processes, mass communications, and other change-agent activities, a composite model for change may be the answer to most situations where innovation is in demand. A composite model for planned change indicates the three broad dimensions of research, development, and implementation (17:7-19).

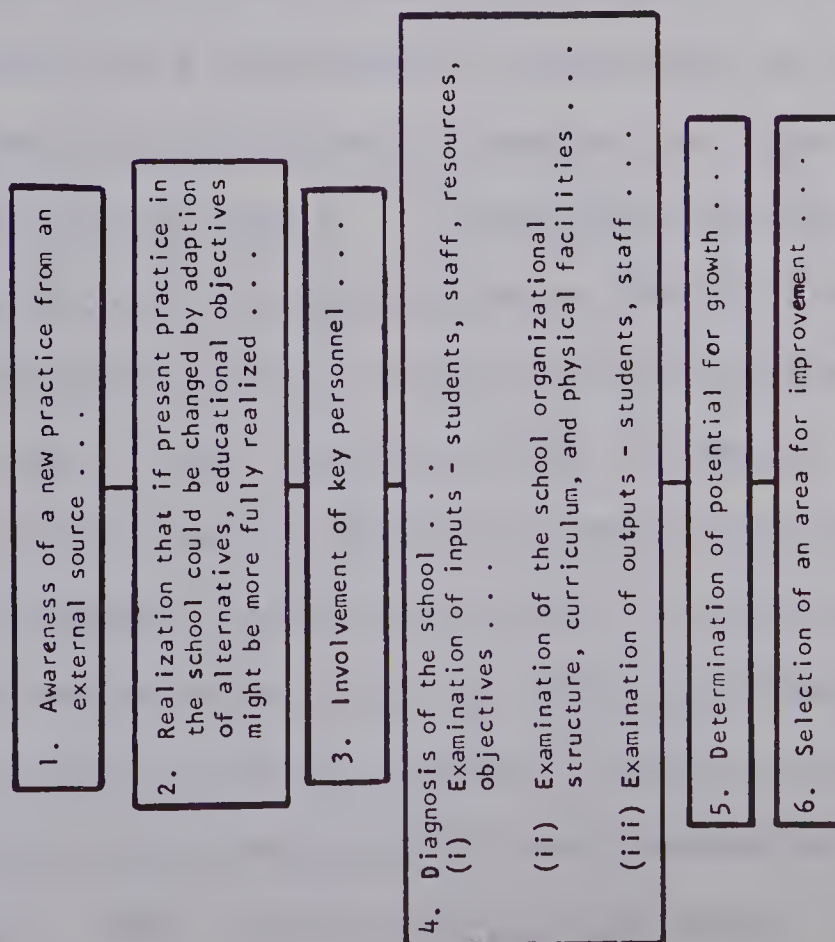
"A Composite Model of a Strategy for Planned Change" in Figure 4, illustrates the involvement of senior administrators, change-agents, and key personnel at the level where the entry of the innovation is planned. It also follows Roger's well known Theory of Adoption, as outlined earlier, although less emphasis is placed upon the interest stage and more emphasis upon diagnosis of the present situation and the selection of a suitable innovation. This is probably so because the report takes an administrative view of the introduction of change. But this does not necessarily conflict with adoption by the individual since suitable supervision of staff at the school level may actually enhance the planned change. The transition from a temporary system for introduction of change to a more permanent commitment occurs in the implementation stage as the innovation is expanded to other parts of the system. Then the change normally becomes an accepted part of the original system. The supervisor's knowledge of teacher expectations for his role and expertise in acting to facilitate innovation are most important in the last stage. There is reason to believe that this third stage can be isolated so that introduction of innovations from within the system may also occur.

The concept of "best entry" for change accepts the premise that change must start somewhere. It may occur where there is the least resistance. Hansen's other tenets of change-agentry parallel the composite model illustrated

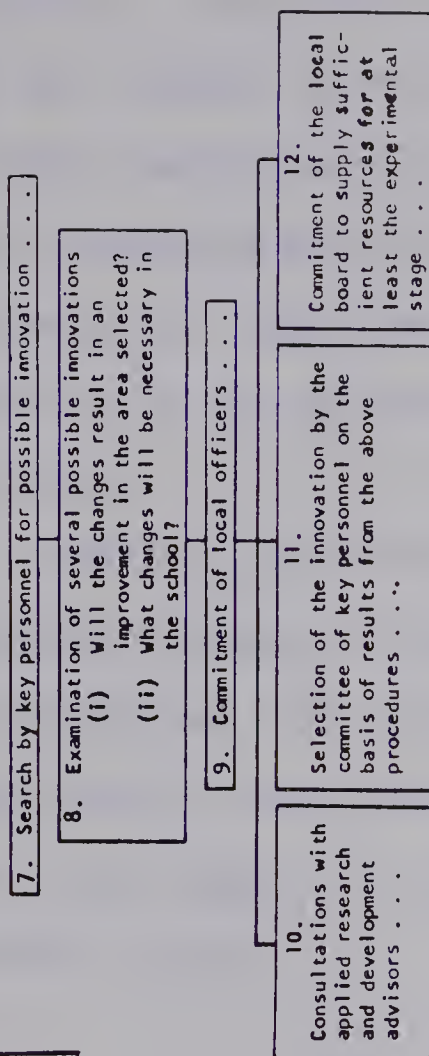
A COMPOSITE MODEL OF A STRATEGY FOR PLANNED CHANGE



Steps in a Process of Planned Change (Stage 1)



Steps in a Process of Planned Change (Stage 2)



Steps in a Process of Planned Change (Stage 3)

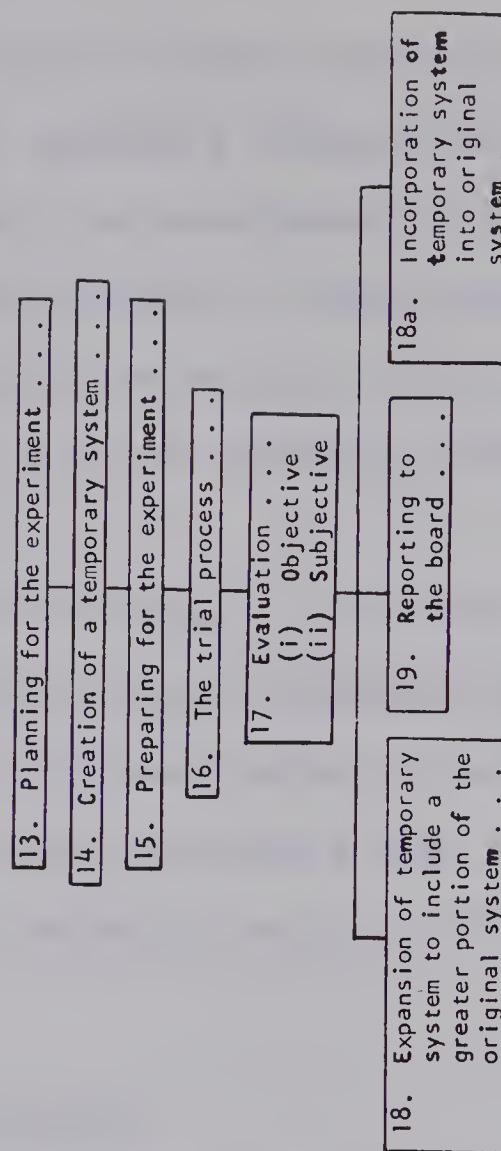


FIGURE 4

Source: Committee Report, Planning and Implementing Change In Ontario Schools, Office of Development, Toronto: The Ontario Institute For Studies In Education, 1967.

in Figure 4. They are analyses of forces creating readiness for change, setting up temporary systems to overcome the first change barriers, and the management of conflicts so that learning may occur (9:108-109). These strategies illustrate the importance of the proximity of the school supervisor to the situation in which desirable changes may take place.

Although no strategy for change is successful in all situations because of important local determinants for the best procedures, the public relations aspect of educational change must be considered. Woods proclaims that "the best general strategy is to keep the staff and the public well informed" (23:58).

II. CONCLUSIONS

Innovation is dynamic and continuous. It affects the individuals within the organization according to their characteristics, the environment created, and the strategies selected by the change-agent. It behooves the educational institution to provide the apparatus to facilitate change.

Administrators at any level must be prepared to analyse the needs of the target system, to employ outside consultants, to utilize the abilities of all persons throughout the change, to work to create the environment for change, and to evaluate progress at every opportunity. Change is facilitated through teacher participation in areas of competence and their recognition and understanding of a need for change. When implementation has begun, the school

administrator is in the crucial position to provide support and encouragement for the teachers and the pupils - both in the school and in the community.

These conclusions are related to the expectations of alter groups for the principal's supervisory role in the initiation of innovations. They indicate that the school administrator and the teacher are key persons in any change that occurs at the instructional level. But, intensive study is required to produce greater congruency of expectations and desirable supervisory techniques to promote improved learning through improved instruction.

III. SUMMARY OF THE RELATED LITERATURE

1. The nature of supervision for the improvement of instruction is determined largely by the people involved in the change and the objectives sought. The school principal and specialist supervisors are available to help the teacher understand the processes of change and cope with the accompanying challenges.
2. The teacher and the supervisor are crucial elements in the implementation of any change. If teacher growth and satisfaction are promoted through their early involvement and knowledge of the need for change, then a more effective school program can be developed and the dissemination of information can occur more readily to provide for extension and acceptance of new ideas.
3. Principals consider the improvement of instruction to be an important objective even though teacher attitudes to such supervision may often be negative. Since supervisory behavior reflects the supervisor's perception of the situation and the expectations of other groups interested in education, he can be especially effective at the school level because of his special knowledge of the staff, his potential as a school change-agent, and the continuing demand for in-service activities to meet local needs.

4. If teacher perceptions of the principal's supervisory role and teacher activities can be influenced by supervisory activities, then some changes can be effected by the principal. But educational innovations generally require the support of senior administrators beyond the school level. Such change-agents, flexible organizations, and temporary systems encourage successful innovation.
5. The process of change can be traced through the stages of awareness, interest, evaluation, trial, and adoption or rejection. Although the information sources rely heavily upon individual cosmopolitanism, later stages of the process require direct communication with a change-agent or other influential person. This adoption process theory has received strong support for use in educational studies.
6. Teacher autonomy and professionalism can be encouraged by the supervisor's style of leadership. If a balance between authority and freedom can be maintained, staff-centered and cooperative activities may facilitate innovation. This strategy should be part of an over-all plan for involvement, diagnosis, trial, evaluation, and expansion or dissemination of the innovation. Three major dimensions of a change model can be isolated. These are research, development, and implementation.
7. The expectations and enthusiasm of personnel at the classroom level partially predetermine the success or failure of attempts to innovate. It is at this level that the school supervisor performs functions that support a positive teacher attitude and facilitates the introduction of innovations.

The following chapter outlines a study to determine the expectations of teachers for the supervisory role of the school principal. The major thesis of the study is that through greater knowledge of the less innovative teachers' and the more innovative teachers' expectations for the principal's supervisory role, the school administrator may be able to encourage teachers toward better educational practices.

REFERENCES FOR CHAPTER III

1. Bennis, W.G. and K. Benne, and R. Chin (eds.). The Planning of Change: Readings in the Applied Behavioral Sciences. New York: Holt, Rinehard and Winston, 1961.
2. Carlson, R.O. Adoption of Educational Innovations, The Centre for the Advanced Study of Educational Administration, U. of Oregon, Eugene, 1965.
3. _____. "Barriers of Change in Public Schools," Change Processes in the Public Schools, R.O. Carlson et al., (eds.) Centre for the Advanced Study of Educational Administration, University of Oregon, Eugene, Oregon, 1965.
4. Chesler, M., R. Schmuck and R. Lippitt. "The Principal's Role in Facilitating Innovation," Theory Into Practice, 2:5 (December, 1963), pp. 269-277.
5. Clark, D.L. and E. Guba. "An Examination of Potential Change Roles in Education," Paper presented to the Symposium on Innovation in Planning School Curricula, Airlie House, Virginia, October, 1965 (Mimeographed).
6. Fisher, H.K. "Implementing Innovation: The Challenge for Supervision," C.E.A. Short Course (June, 1966), Banff, Alberta (Mimeographed).
7. Flanders, Ned A. "The Administrator and Instruction," The Elementary School Journal, 66:1 (October, 1956), pp. 28-35.
8. Griffiths, D.E. "The Elementary School Principal and Change in the School System," Theory Into Practice, 2:5 (December, 1963), pp. 278-284.
9. Hansen, K.H. "Design for Decision," National Association of Secondary School Principals Bulletin, 322:51 (November, 1967), pp. 105-113.
10. Heathers, Glen. "Influencing Change at the Elementary Level," Perspectives on Educational Change. R. Miller (ed.), New York: Appleton-Century-Crofts, 1967, pp. 23-52.
11. Holdaway, E. and J. Seger. "Change and the Principal," The Canadian Administrator, 7:5 (February, 1968), pp. 17-20.

12. Ingram, E.J. "Supervising The Instructional Program: The Role of the Principal," C.S.A. Bulletin, 6:5 (June, 1967), pp. 23-41.
13. _____. "The Process of Change," The C.S.A. Bulletin, 5:4 (May, 1966), pp. 33-51.
14. Lionberger, Herbert F. Adoption of New Ideas and Practices. Ames, Iowa: Iowa State University Press, 1960.
15. Lippitt, R. and Colleagues. "The Teacher as Innovator, Seeker, and Sharer of New Practices," Perspectives On Educational Change. R. Miller (ed.), New York: Appleton-Century-Crofts, 1967.
16. Miles, M.B. (ed.). Innovation In Education. New York: Teachers' College, Columbia University, 1964.
17. Ontario Institute for Studies in Education, "Planning and Implementing Change in Ontario Schools," A Committee Report, Office of Development, 1967 (Mimeographed).
18. Pellegrin, R.J. "Educational Organizations and Problems of Innovation," Change and Innovation. (Carson, ed.) Seminar Series for School Administrators, Department of Educational Administration, University of Calgary, Alberta, 1967, pp. 33-47.
19. Rogers, E.M. Diffusion of Innovations, New York: The Free Press, and London: Collier-MacMillan Ltd., 1962.
20. _____. "Categorizing the Adopters of Agricultural Practices," Rural Sociology. 23:345-354, December, 1958.
21. _____. "What Are Innovators Like?" Change Processes In The Public Schools. R.O. Carlson et al., (eds.), Centre for the Advanced Study of Educational Administration, University of Oregon, Eugene, 1965, pp. 253-254.
22. Swearingen, M.E. Supervision of Instruction, Boston: Allyn & Bacon Inc., 1962.
23. Woods, Thomas E. The Administration of Educational Innovation. Bureau of Educational Research, School of Education, University of Oregon, Eugene, May, 1967.

24. Yakimishyn, Michael P. "A Study of the Relationship Between Selected Characteristics and the Innovativeness of Junior High School Teachers," Unpublished Master's thesis, University of Alberta, Edmonton, 1967.

CHAPTER IV

DISCUSSION AND DEFINITION OF THE PROBLEM

This chapter contains a description of the problem and an overview of the study. Terms are defined, hypotheses and assumptions are presented, along with the delimitations and the significance of the study.

I. THE PROBLEM

A survey of the material available on supervision in education indicates considerable research and voluminous literature. As indicated earlier, various authors have found that teachers resist classroom visitation by the principal and they see little value in demonstration lessons by the principal. Yet these are two of the most common supervisory practices used in the elementary schools in the name of supervision.

Historically, the role of the principal has been administrative in nature and function. But the increasingly complex role of the principal as a supervisor, administrator, and manager has become more evident in recent years, as the principal fulfills his positional role within the educational organization.

An understanding of modern supervision of instruction is essential because of its growing complexity. Supervision of instruction has come to involve many professional developmental activities that will promote professionalism

and teacher growth on the job. These activities imply self-actualization, self-direction, and self-evaluation. They may also imply the discovery of new abilities and insight.

Recently, innovation has been emphasized in education and "in-vogue" activities may have been imposed upon teachers who are not predisposed to use them. These same activities may not be compatible with the nature and expectations of the individual teacher. And so it is possible that the principal as a supervisory agent may be inclined to overlook the qualities of good teaching on an individual basis as he attempts to integrate the individual teacher into an innovative team or program. Such action may actually be detrimental to quality teaching in isolated or not-so-isolated cases, regardless of how desirable the innovation may seem to be.

In view of the individuality of teachers and the need for innovative practices, the identification and initiation of preferred methods of supervision is a primary concern of the principal. Supervisors inclined to encourage innovation might be more effective and acceptable to the teachers if they could establish a more accurate set of teacher expectations for their supervisory activities.

Statement of the Problem

Is there any relationship between the degree of innovativeness among teachers and their expectations for the supervisory activities of the elementary school principal?

Sub-Problem

What is the order of importance for major areas of supervision for the improvement of instruction as expressed by teachers grouped according to their degree of innovativeness?

II. HYPOTHESES

1. When teachers are classified according to their innovativeness, there will be no significant difference between the groups in their agreement upon the items related to teacher expectations for the principal's supervisory role.

2. No significant differences exist in the rank order of importance of major areas in supervisory practices as expressed by teachers categorized according to their degree of innovativeness.

III. ASSUMPTIONS

1. The primary assumption in this study relates to the honesty and ability to recall of the individual teacher. It has been assumed that every teacher completed the questionnaire with accuracy and professional integrity. The quality of these characteristics has largely determined the validity of the data collected for this study.

2. There are several acceptable practices that a principal can use to help the teacher to improve his instruction at the classroom level. Information about

these practices can be gathered by means of a questionnaire that accurately reflects teacher expectations for principal selection of these practices.

3. The teachers have considerable freedom in utilizing and experimenting with innovations at the classroom level.

4. Teachers accept programs and other innovations from within or from outside their local environment but they do not use such innovations unless they approve of the practices or services.

IV. DEFINITIONS OF TERMS

Change, Adoption and Innovation: These terms have been used synonymously throughout this study as they are in most of the related literature.

An innovation is an act or a practice which is relatively new to an individual or system and which the individual may consider to be a recent addition to the teaching situation.

Innovativeness: This is the characteristic of an individual that indicates a degree of adoption or experimentation with a number of new practices measured by the ratio of new practices used to the new practices that are available to the teacher.

Supervision: The activities of personnel that deal primarily with the improvement of instruction have been included. This incorporates the activities where the goal is to

assist and support the teacher in the development of a progressive learning situation.

V. DELIMITATION OF THE STUDY

1. The writer has chosen his sample from the City of Guelph, Ontario. As a result, this study has been limited to a small segment of the teacher population who voluntarily completed the questionnaire. Any generalizations outside of this population must be treated with caution.

2. The individual teacher and his expectations are the subjects of this study. No attempt has been made to evaluate the quality and merits of these expectations or of the principal's supervisory activities.

3. This study focuses upon differences in teacher expectations for the principal's supervisory role according to the degree of innovativeness of the teacher. Where teachers are in general agreement with the principal's role, these expectations have not been reported.

4. The principals, consultants and supervisors have not been included since all of the questions could not logically be answered by them. None of these persons teach for over half of the school day.

5. The instructional innovations have been limited to those devices and instructional practices that are readily available to the teacher in every school without additional large expenditures.

VI. SIGNIFICANCE OF THE STUDY

Studies from the administrative view at the elementary level are not plentiful and many of the administrative decisions at that level are based upon text and article presentations which do not present the complete picture. Other decisions are made on the basis of functions and decisions from other levels of the educational scene such as secondary or tertiary education. Although there obviously are certain parallels that can be drawn, many situations are pertinent only at the elementary level and actions taken there must be related to the actual circumstances of that environment as these can be determined by research.

Generally speaking, many qualities distinguish elementary teachers from other levels of education. No one can deny the variety of the quality of teaching that occurs at the elementary level. The reasons for this are probably as diverse as the number of individuals but these individuals are all influenced by a common school atmosphere. The principal, as the school supervisor, is in a position to involve and support teachers in their educational endeavors. This study is one small movement in the direction of determining the expectations of the "key factor" in quality education -- the teacher. If the expectations of the teachers for the principals' supervisory role can be determined more accurately, then the likelihood of the

principal becoming more effective can be increased.

The principal-supervisor is most important in the development of a positive attitude and responsibility toward innovation. He is the resident supervisor and as such he has close contact with all teachers in the learning situation; he is in a better position to perceive the influentials and opinion leaders and therefore to utilize their abilities. But he requires clues related to the most desirable practices that will support innovation and the development of instructional quality. With information from this and other studies related to teacher expectations, better utilization of the unique resources of both the more innovative teacher and the less innovative teacher can occur.

A significant by-product of this study has been the arousal of interest among teachers and administrators toward research, innovation, and supervisory practices. A more complete realization of the importance of their roles in the educational process may have been encouraged.

Finally, any discovered relationship between innovativeness and teacher expectations may contribute to the search for improved practices in educational supervision.

VII. OVERVIEW OF THE STUDY

Some aspects of instructional supervision and innovation have been outlined in Chapters I, II, and III. The problem has been discussed and defined for this study;

the hypotheses, assumptions and delimitations have been shown, and the significance of studies in the area of teacher expectations has been discussed. The particular needs for this study have also been presented in this Chapter.

Chapter V contains the research design and methodology. This includes the description of the instrument and of the sample. An overview of the statistical analysis is also shown. In Chapter VI, the analysis of data and the report of the findings are presented. In Chapter VII, the findings and implications are discussed. Several tentative conclusions are drawn from this discussion of the findings. In the final chapter, Chapter VIII, the summary, conclusions, recommendations and suggestions for further study are presented.

CHAPTER V

RESEARCH DESIGN AND METHODOLOGY

Introduction

This chapter presents a description of the population from which the data have been drawn. The distribution of the questionnaire is considered as well as the collection and per cent returns. Included also is a brief section on instrumentation, credit for the original versions of the instrument, and some description of minor adaptations. Finally, the categorization of teachers and an overview of the statistical analysis of data is presented.

I. SOURCE OF DATA

The study was conducted in the elementary (K-8) schools in the City of Guelph, Ontario. The superintendent of elementary education was contacted for approval of the questionnaire and formal approval of the study. A copy of the letter has been included as Appendix A₁.

Guelph is the largest city (50,000 population) in the County of Wellington and has recently been incorporated into the reorganized county system of education for Ontario. The public elementary school system consists of nineteen schools and 235 classroom teachers dispersed broadly from kindergarten through grade eight. Table I illustrates the frequency distribution for the years of teaching experience for all of those teachers in the

sample. In terms of the classifications chosen, these teachers are quite normally distributed although the majority of teachers in this study have less than ten years experience. Table II shows the professional qualifications of the respondents. Although 85 per cent of these elementary school teachers do not have a degree, many have taken courses leading to a degree. Many others who are more highly qualified were eliminated from the study since they do not teach 50 per cent or more of the time. Table III shows the distribution according to the teaching positions held in the school year 1968-1969 and it is apparent that all grade levels are well represented by those teachers who responded. Table IV depicts the excellent response to the questionnaire. These tables are used to illustrate the distribution of elementary school teachers according to these characteristics and to describe the basic setting for this study.

All teachers were requested to complete the instrument which had been distributed to them through the offices of the superintendent and the principals. The responses were treated anonymously and were identified only with the name of the school. Return envelopes were provided so that the questionnaires could be mailed back as quickly and efficiently as possible. The teachers responded with 90.2 per cent of the questionnaires completed. However, approximately 3 per cent were not useable. A total of 86.8 per cent of the potential teacher respondents are

represented by these returns.

II. INSTRUMENTATION

The instrument chosen for this study (Appendix B) was based upon the principle of individual response and recall of actual as well as preferred practices. Because of the individuality of responses, scores were obtained from these instruments so that means could be obtained for grouping and study of the variables. Scores were essential since the degree of innovativeness should be expressed as a concept on a continuum of innovativeness. This information was then categorized for rational discussion.

Permission was requested from Michael P. Yakimishyn and Harry H. Hooge to adapt their instruments, which were conceived in 1964-67, for use in this study. Most items included in these instruments were useable in this study and have been validated by the authors. Some alterations in the format and vocabulary of both instruments were made to increase the ease of completion and to adapt the vocabulary to the area under study.

The "Teacher Practices" section of Yakimishyn's instrument has been effective and reliable in the measurement of instructional innovativeness. Several items classified as "abstractions" were removed from the original instrument. Since the nature of this study did not indicate a need for sub-scores, the sub-sections were combined to form Section II of the present questionnaire and to give an

TABLE I

FREQUENCY AND PER CENT DISTRIBUTIONS OF TEACHERS IN THE
SAMPLE BY TEACHING EXPERIENCE IN YEARS

Number of Years	f	Per Cent
1 or less	18	9
2 to 5	71	35
6 to 10	63	31
11 to 15	25	12
16 to 20	14	7
21 plus	13	6
Totals	204	100

TABLE II

FREQUENCY AND PER CENT DISTRIBUTION OF TEACHERS IN THE
SAMPLE BY PRESENT TEACHING QUALIFICATIONS

Level	f	Per Cent
Grade 12 plus 2 years	174	85
Grade 12 plus 4 years (B.A.)	23	11
Grade 12 plus 5 years (Cat.V)	4	2
Grade 12 plus 6 years (Cat.VI)	2	1
Beyond Category VI (Dr., etc.)	1	1
Totals	204	100

TABLE III

FREQUENCY AND PER CENT DISTRIBUTION OF TEACHERS
IN THE SAMPLE BY PRESENT TEACHING POSITION

Level	f	Per Cent
Kindergarten to grade 3	84	41
Grades 4 to 6	66	32
Grades 7 to 8	49	24
Other areas (special classes)	5	3
Totals	204	100

TABLE IV

SUMMARY OF THE RESPONSES
TO THE QUESTIONNAIRE

Questionnaires	Number	Per Cent
Submitted	235	100
Returned	212	90
Not Useable	8	3
Useable Returns	204	87

overall ratio of innovativeness based upon "the number of innovations adopted as compared to the number of innovations available for adoption" (7:83). Yakimishyn's "Teacher Practices" section was developed from items that were identified by principals in Manitoba Junior High Schools as "instrumental innovations." In addition, only those items which could be applied to most subject areas were finally included and the innovativeness ratio was used based on the above formula. A section for other items and teacher practices was added to Section II after consultation with members of this department.

Some doubt concerning the inclusion or exclusion of items from the innovativeness questionnaire was encountered since innovation generally refers to the extent of adoption of relatively new practices and things. Accordingly, an attempt was made - and has been continued - to base the level of innovativeness upon the practices and devices available for use as related to the use that is made of these. Some devices included were not entirely new but have been accepted on the assumption that their use is indicative of an acceptance of new practices and methods of instruction which is akin to innovativeness.

Hooge's questionnaire has been shown to measure teacher expectations at the elementary level. It has been used with slight modifications to develop the Teacher Expectations Section and the Order of Importance for Major Supervisory Practices Section of the overall instrument.

This part of the questionnaire was originated by Hooge and validated in a pilot study in British Columbia elementary schools which resulted in clarification and modification of the instrument. The format was a "directed questionnaire" scored according to the Likert scale (3:47-49). A similar procedure has been followed in this study.

Section I related to personal and professional information and has been used to describe the population. Section V was added to the overall instrument to provide an opportunity for teacher expression of opinion and for the presentation of other major supervisory techniques or practices that the teacher may have wished to support.

III. GROUPING PRACTICES

Section II of the instrument provided innovativeness scores for all of the teachers who responded to it. A ratio of the number of practices used out of the number of practices or items available for the teacher to use was found for each respondent as indicated above. These scores were converted to per cents and arbitrarily classified at equal intervals from the median to provide five groups according to the degree of teacher innovativeness. This information was collapsed by combining groups one and two which were assigned to the degree of less innovativeness and groups four and five which were assigned to the degree of more innovativeness. The middle group was then eliminated from further study to provide data which could be treated statistically for the comparison of dual group

expectations for the principal's supervisory role.

The teacher expectations for the principal's supervisory role were placed on the continuum from strongly agree to strongly disagree on a Likert-type scale. This permitted the analysis of the sixty-one variables which comprised the Teacher Expectations (Section III) of the questionnaire.

Using the Order of Importance of Major Items (Section IV) of the questionnaire, the more innovative teachers' and the less innovative teachers' rankings of the eight supervisory practices were compared.

IV. OVERVIEW OF THE ANALYSIS

A t test was performed on each of the items under Teacher Expectations to find whether significant differences existed between the less innovative teachers and the more innovative teachers. The Welch-T Prime Approximation was also examined on any variable indicating a lack of homogeneity at the .05 level of confidence in order to confirm the findings of the t test. Statistically significant differences were accepted at the .05 level of confidence for the two-tailed test (2:191-195).

The statistical analysis for Order of Importance of Major Items of supervision was undertaken using the Mann-Whitney rank order test for independent samples (6:116-118). Ranks were also obtained for each practice within the groups by finding the mean value of all of the ranks assigned to each item by the teachers. The Coefficient of

Concordance provided a descriptive measure of agreement of ranks within the groups of teachers as they have been defined for this study.

REFERENCES FOR CHAPTER V

1. Davitz, J.R. and Lois Jean Davitz. A Guide for Evaluating Research Plans in Psychology and Education. Teachers College, Columbia, 1967.
2. Ferguson, G.A. Statistical Analysis in Psychology and Education. New York: McGraw-Hill, 1966.
3. Hooge, H.H. "The Role of the Elementary School Principal in British Columbia," Unpublished Master's thesis, The University of Alberta, Edmonton, 1967.
4. Kaplan, Abraham. The Conduct of Inquiry. San Francisco: Chandler Book Co., 1964.
5. Selltitz, Claire et al. Research Methods in Social Relations. New York: Holt, Rinehart and Winston, 1959.
6. Siegel, Sidney. Non-Parametric Statistics for the Behavioral Sciences. New York: McGraw-Hill, 1956.
7. Yakimishyn, M.P. "A Study of the Relationship Between Selected Characteristics and the Innovativeness of Junior High School Teachers," Unpublished Master's thesis, The University of Alberta, Edmonton, 1967.

CHAPTER VI

ANALYSIS OF THE DATA

Introduction

This chapter contains the data which includes the distribution of the instructional innovativeness ratios, the item analysis of teacher expectations for the principal's supervisory role, the comparison of teacher rankings for the major areas of supervisory activity by the principal, and a brief presentation of the areas of concern expressed by the teachers as these are related to the supervisory activities of the principal.

The major purpose of the study was to determine whether a relationship exists between instructional innovativeness and teacher expectations for the principal's supervisory role. Although this analysis examines all of the variables which were included in Sections III and IV of the questionnaire, differences between the less innovative teachers' and the more innovative teachers' expectations are discussed for those supervisory practices where significant differences were found at the .05 level. The null hypothesis that there is no significant difference between the less innovative teachers and the more innovative teachers was tested on each of the dependent variables which was used to describe teacher expectations for activities related to the supervisory role of the principal.

I. DISTRIBUTION OF INSTRUCTIONAL INNOVATIVENESS RATIOS

As indicated earlier, the instructional innovativeness ratio was based upon the total number of relatively new practices used by the teacher out of the total number of such practices available to the teacher. Table V indicates the distribution of the innovativeness ratios over the whole sample. Approximately 4 per cent of the teachers in the population belong in the category of lowest innovativeness, 15 per cent were located in category two, 40 per cent in category three, 35 per cent in category four, and 6 per cent belonged in the highest category of innovativeness. This distribution tends to be normally distributed and positively skewed.

These instructional innovativeness scores were then collapsed by combining intervals one and two to form the classification defined as less innovative teachers (Group I) and combining intervals four and five to form the classification defined as more innovative teachers (Group II). The middle group of eighty-one respondents was not included in the study of teacher expectations. The distribution of less innovative teachers and more innovative teachers is shown in Table VI. The less innovative teachers represented 32 per cent of those included for statistical analysis and the more innovative teachers made up the other 68 per cent. Accordingly, a total of 123 respondents have been

TABLE V

DISTRIBUTION OF THE INSTRUCTIONAL INNOVATIVENESS RATIOS
(Questionnaire - Section II)

(N=204)

Ratios *	Category	Frequency (f)	Percentage f
81 - 100	5	13	6.3
61 - 80	4	71	34.8
41 - 60	3	81	39.7
21 - 40	2	30	14.8
0 - 20	1	9	4.4
Total	-	204	100.0

* Ratios = $\frac{\text{Total Number of Innovations Adopted}}{\text{Total Number of Innovations Available for Adoption}}$

TABLE VI

DISTRIBUTION OF LESS INNOVATIVE AND MORE INNOVATIVE
TEACHERS BASED UPON DEGREE OF
INSTRUCTIONAL INNOVATIVENESS

(N=123)

Teacher Classification	Group	f	Per Cent
Less Innovative Teachers	I	39	31.7
More Innovative Teachers	II	84	68.3
Totals *	—	123	100.0

* These totals represent all of the teachers included in the study.

included for the statistical analysis in this study.

II. ITEM ANALYSIS OF TEACHER EXPECTATIONS FOR THE PRINCIPAL'S SUPERVISORY ROLE

Section III of the questionnaire used in this study was made up of a list of sixty-one dependent variables from which teacher expectations could be determined on a continuous scale from strongly agree, through agree, undecided, and disagree, to strongly disagree. The respondents provided one response to each item on this continuum and scores were assigned from one to five in the direction from agree to disagree, respectively. A computer analysis using t tests was then performed to find out if significant differences existed between the more innovative teachers and the less innovative teachers for each variable.

Table VII is used to present a summary of the item variables which showed significant differences at the .05 level of confidence or better. A total of twelve variables met these requirements. Five of these variables belong in the category of "Individual Conferences," two in "General Staff Meetings," three in "Action Research," and one belongs in each category of "Teaching Area Visitation" and "Miscellaneous." Table VIII shows both the number and per cent of items that were significant for each category in this section of the instrument. The largest per cent (42.86) of the variables fell into the category of "Action Research" and this factor will be discussed in Chapter VII.

Since the t test focuses upon mean responses and thus does not indicate the nature of distribution of responses within each group, a summary of the percentage distributions for each of the twelve significant variables is shown in Table IX. Examination of this table shows that a full range of responses occurs in most cases -- even though significant differences do exist between the less innovative teachers' and the more innovative teachers' expectations for the principal's supervisory role in relation to these twelve variables. Thus it can be stated that the predictable differences are generally in degree of agreement or disagreement rather than outright acceptance or rejection of the particular supervisory activity.

Table VII also shows the means of responses of Group I (less innovative teachers) and Group II (more innovative teachers) with respect to each significant variable. The higher the mean the less acceptance of the activity is implied. Thus from columns 3 and 4 of Table VII, it can be seen that the more innovative teachers are in greater agreement with the principal supervisory activity of classroom visitation, individual conference after visitation, assistance in problem identification, group conferences, subject level conferences, setting up staff agenda committees, encouraging the use and evaluation of a variety of instructional methods, experimentation with new methods, and encouraging research activities on problems at the classroom level. But Group II more strongly reject the

TABLE VII

TEACHER EXPECTATIONS ON ITEMS WHICH SHOWED A
SIGNIFICANT DIFFERENCE AT THE .05 LEVEL BETWEEN
THE LESS INNOVATIVE TEACHERS (GROUP I) AND THE
MORE INNOVATIVE TEACHERS (GROUP II)
(Questionnaire - Section III)

Variable Number	Item	Group \bar{X} -I	Group \bar{X} -II	Probability
TEACHING AREA VISITATION				
1	Classroom Visitation. . .	2.69	2.19	0.03
INDIVIDUAL CONFERENCE				
17	Conference After Visitation. . .	2.87	2.31	0.00
20	Assist in Problem Identification. . .	2.33	1.98	0.01 *
24	Pre-School Conferences . . .	3.31	2.56	0.00
27	Arrange Group Conferences . . .	2.51	2.11	0.01
28	Arrange Subject Conferences . . .	2.69	2.32	0.03
GENERAL STAFF MEETINGS				
35	Staff Agenda Committees. . .	2.62	2.11	0.00 **
36	Social Meetings. . . .	3.00	2.40	0.01
ACTION RESEARCH				
38	Variety of Instructional Methods	1.97	1.79	0.04
39	Experimentation With New Methods	1.90	1.61	0.00
40	Encourage Research Activities. . .	2.28	1.99	0.04
MISCELLANEOUS				
60	Not Inform of Parental Complaints. . .	3.77	4.21	0.03
Total - 12		-	-	-

* Welch-T Prime Approximation = 0.03

** Welch-T Prime Approximation = 0.00

Variances were unequal between the groups and this test was applied to adjust the value of t for accurate probabilities at the .05 level (Critical Value = approximately 1.54).

TABLE VIII

PERCENTAGE AND FREQUENCIES OF ITEMS REVEALING
SIGNIFICANT DIFFERENCES BETWEEN THE RESPONSES
OF LESS INNOVATIVE TEACHERS AND
MORE INNOVATIVE TEACHERS
(Questionnaire-Section III)

(N=123)

Sectional Categories	Number of Items in the Category	Number of Items With Significant Differences at the .05 level	Per Cent of Items for each Category
Teaching Area Visitation	12	1	8.33
Individual Conferences	20	5	25.00
General Staff Meetings	5	2	40.00
Action Research	7	3	42.86
Bulletins and Other Aids	5	0	0.00
Demonstration Teaching and Scheduled Visitation	5	0	0.00
Miscellaneous	7	1	14.29
Totals	61	12	--

idea of not being informed by the principal of parental complaints. At the same time, Group I tended to reject pre-school conferences for orientation purposes and showed only marginal acceptance of principal promotion of social meetings to promote group cohesion. These less innovative teachers tended to be undecided in relation to these variables more often than did the other group. This trend will be considered in Chapter VII.

Teaching Area Visitation

As shown in Table VIII, one item in this section revealed a significant difference between the two groups. Although both the less innovative teachers and the more innovative teachers tended to agree with the principal visiting classrooms regularly to determine the quality of teaching, Table IX shows that 75 per cent of the more innovative teachers were in general agreement while only 51 per cent of the less innovative teachers tended to agree. In addition, almost five times the proportion of less innovative teachers were undecided as compared to the other group. A similar trend occurs with several other variables and these will be discussed in the next chapter.

Individual Conferences

One-quarter of the items included in this section were significantly different. That a principal should confer with a teacher following a demonstration lesson or directed visitation was supported by 70 per cent of the more

innovative teachers and 8 per cent strongly agreed with this activity. But only 46 per cent of the less innovative teachers agreed. And in addition, 31 per cent of them disagreed with this kind of conference. This represents almost four times the proportion of less innovative teachers who disagreed as compared to the more innovative teachers. A discussion of this disagreement follows in Chapter VII.

The more innovative teachers showed strong agreement that the principal should help the teachers to identify, study, and take action on problems in their own teaching areas. Over 90 per cent tended to agree with this and 17 per cent strongly agreed. About 75 per cent of the less innovative teachers tended to agree but over 23 per cent were undecided as compared to 5 per cent of the more innovative teachers. Three times the proportion of less innovative teachers tended to disagree on this particular supervisory practice.

The next item produced a strong conflict of opinion. Over 60 per cent of the more innovative teachers tended to agree that the principal should hold pre-school conferences for orientation purposes. Only 23 per cent of this group tended to disagree. However, over 51 per cent of the less innovative teachers disagreed with a pre-school conference while only one-third of them tended to agree with this activity. Since many teachers do not support pre-school conferences for orientation purposes, this factor will be considered in the next chapter.

TABLE IX

PERCENTAGE OF GROUP RESPONSES TO SUPERVISORY PRACTICES

Practices	Less Innovative Teachers					More Innovative Teachers				
	SA	A	U	D	SD	SA	A	U	D	SD
VISITATION										
Classroom.....	15.4	35.9	20.5	20.5	7.7	28.6	46.4	4.8	17.9	2.4 *
CONFERENCES										
After										
Visitation.....	0.0	46.2	23.1	28.2	2.6	8.3	60.7	22.6	8.3	0.0 ***
Assist in										
Problem I.D....	15.4	48.7	23.1	12.8	0.0	16.7	73.8	4.8	4.8	0.0 *
Pre-School.....	7.7	25.6	10.3	35.9	15.4	10.7	50.0	15.5	20.2	3.6 ***
Arrange Group										
Conferences.....	2.6	61.5	20.5	12.8	2.6	20.2	58.3	11.9	9.5	0.0 *
Arrange Subject										
Conferences.....	0.0	56.4	20.5	20.5	2.6	10.7	58.3	20.2	9.5	1.2 *
STAFF MEETINGS										
Agenda										
Committee.....	5.1	56.4	10.3	28.2	0.0	11.9	72.6	8.3	7.1	0.0 **
Social										
Group.....	2.6	46.2	12.8	25.6	12.8	14.3	53.6	15.5	10.7	6.0 **
ACTION RESEARCH										
Instructional										
Methods.....	10.3	84.6	2.6	2.6	0.0	23.8	73.9	2.4	0.0	0.0 *
Experiment										
With New										
Methods.....	15.4	82.1	0.0	2.6	0.0	40.5	58.3	1.2	0.0	0.0 **
Encouragement..	5.1	66.7	23.1	5.1	0.0	21.4	64.3	9.5	3.6	1.2 *
MISCELLANEOUS										
Not Inform re										
Complaints.....	5.1	15.4	7.7	41.0	30.8	0.0	11.9	2.4	38.1	47.6 *

* Significant differences at the .05 level, ** at the .01 level, *** at the .001 level.

The arrangement of both group conferences and subject level conferences by the principal received strong support. But even here, only 60 per cent of the less innovative teachers tended to agree and over 20 per cent were undecided. Over 78 per cent of the more innovative teachers agreed upon both of these supervisory practices and about 10 per cent tended to disagree. This represents a small proportion of the more innovative teachers as compared to approximately twice the rate of less innovative teachers who tended to disagree with the principal activity in the areas of group and subject level conferences.

This significantly different response between Group I and Group II on variables referring to conference activities will be discussed in Chapter VII with particular reference to the relatively large proportion of less innovative teachers who have shown a lack of support for conference-type activities.

General Staff Meetings

Two out of five, or 40 per cent of these variables, showed a significant difference between the responses of less innovative teachers and more innovative teachers. Of the latter group, 85 per cent strongly supported principal encouragement of staff agenda committees to select, for discussion, problems that are commonly accepted as worthy. Only 7 per cent of the more innovative teachers tended to disagree as compared to over 28 per cent of the less

innovative teachers who tended to disagree with principal activity in this area.

Even stronger disagreement between the group is shown for principal encouragement of social meetings to promote group cohesion. Less than 50 per cent of the less innovative teachers tended to agree with this practice while almost 70 per cent of the more innovative teachers agreed. And 40 per cent of the former group tended to disagree with this principal activity as compared to less than 17 per cent of the latter group. These findings indicate considerable disagreement between the groups on these two variables related to staff meetings. Its relevance will be discussed in the next chapter.

Action Research

The largest proportion of items which displayed a significant difference among the responses between the teacher groups occurred in this section. Three out of seven or over 42 per cent of the variables are represented in this presentation and in the later discussion. The importance indicated here by most teachers for principal activity in the area of action research cannot be ignored. But certain differences do exist between the groups, particularly in the area of strong agreement.

That a principal should encourage teachers to use and evaluate a variety of instructional methods showed 24 per cent of the more innovative teachers in strong agreement while only 10 per cent of the less innovative teachers

responded in this category.

Over 40 per cent of the more innovative teachers agreed strongly that the principal should encourage experimentation with new teaching methods but only 15 per cent of the less innovative teachers strongly agreed with this activity.

A similar pattern of responses developed on the variable which stated that a principal should encourage research activities based on educational problems in the teaching area. Over 21 per cent of the more innovative teachers strongly agreed on this practice while only 5 per cent of the less innovative teachers strongly agreed. Another "undecided" trend by the less innovative teachers appeared on this item with over 23 per cent in this category. Less than 10 per cent of the more innovative teachers were undecided with regard to the encouragement by the principal of such action research activities.

The difference in degree of agreement between the teacher groups classified according to innovativeness on these action research variables will be discussed further in Chapter VII.

Miscellaneous

As shown in Table VIII, only one of these items produced a significant difference between the responses of the more innovative teachers and the less innovative teachers. Over 85 per cent of the more innovative teachers tended to disagree that the principal need not inform the

teacher against whom there has been a parental complaint if he has satisfied the parent who made the complaint. Just over 70 per cent of the other group disagreed with such a supervisory practice. But 21 per cent of the less innovative group agreed that the principal need not inform them in this case. This represents twice the proportion of less innovative teachers who tended to agree as compared to the more innovative teachers who agreed in this instance. At least three times the rate of less innovative teachers as more innovative teachers were again undecided in relation to this practice. This indecisiveness has been indicated on other variables. It will be discussed in Chapter VII.

Examination of the other forty-nine dependent variables from Section III of the questionnaire indicated trends for general teacher expectations for the principal's supervisory role in working toward the improvement of instruction. It is not the intent of this study to examine such relationships but the interested reader should refer to Appendices B and C for additional data related to teacher expectations keeping in mind that these have been determined according to the degree of teacher innovativeness.

Summary

1. The relationship between the innovativeness of the classroom teacher and his expectations for the principal's supervisory role has been presented on classroom visitation, conferences following directed visitations and demonstration lessons, helping the teacher to identify and

take action upon teaching area problems, holding pre-school conferences for orientation purposes, and arranging group and subject area conferences. Encouraging the setting up of staff agenda committee and social meetings, encouraging teachers to use and evaluate a variety of instructional methods, to experiment with new teaching methods, to research activities based on educational problems in the teaching area, and informing the teacher when there has been a parental complaint have also been related to teacher innovativeness.

2. Less innovative teachers and more innovative teachers differ in their expectations for approximately 20 per cent of the principal's supervisory activities listed in this study.

3. More innovative teachers appear to expect more action from the principal and they tend to agree more strongly with the desirability of supervisory activities.

4. Although all teachers tended to have definite views concerning the supervisory activities, the less innovative teachers were more often undecided on these variables than were the more innovative teachers. This trend may indicate both the ability and the desire of more innovative teachers to participate in greater decision-making at the instructional level.

III. TEACHER ESTIMATED RANKINGS FOR THE MAJOR AREAS OF SUPERVISORY ACTIVITY BY THE PRINCIPAL

Section IV of the questionnaire used in this study consisted of eight dependent variables of major supervisory practices about which teachers could estimate their order of importance for the improvement of instruction. These variables were ranked in order of priority from first to eighth by all teachers and comparisons were drawn between and within the rankings of the less innovative teachers and the more innovative teachers.

Mean ranks were found for each variable as these had been expressed by the more innovative teachers and the less innovative teachers. Using these mean ranks, the variables were re-ordered for each group as has been shown in Table X. It is immediately apparent that seven out of eight of these variables were ranked differently on the average by each group of teachers.

The Mann-Whitney U test was performed to establish which variables were most operative in differentiating between the rank orders, and to test the relationship between group membership and each of these dependent variables. Table XI displays the U values for each variable and the probabilities of group membership as a significant factor in determining the rank order assigned by the more innovative teachers and the less innovative teachers. Two variables (25 per cent of the total) were significantly

related to group membership. These were "Demonstration lessons by specialists" and "Arrange group conferences among teachers within the school."

The less innovative teachers and the more innovative teachers differed significantly on their estimated rank of the variable that a principal should arrange to have demonstration lessons taught by superior teachers, supervisors and/or consultative personnel. This item received first priority by the less innovative teachers but fifth priority by the more innovative teachers as can be seen in Table X. Apparently, the more innovative teachers value this practice as a supervisory activity by the principal less than other activities such as encouragement for staff projects and arranging intra-school group conferences. The less innovative teachers, however, want to see what methods and materials are utilized by such influentials as superior teachers, supervisors, and consultants.

The less innovative teachers and the more innovative teachers also differed significantly on their estimated ranking of the variable that the principal should arrange group conferences among teachers within the school. Table X shows that the more innovative teachers gave this practice a mean rank of second priority while the less innovative teachers ranked the practice fifth on the average.

Although only the major items discussed above showed statistically significant differences between the rankings

TABLE X

THE RANKS ASSIGNED BY THE LESS INNOVATIVE TEACHERS
 (I) AND THE MORE INNOVATIVE TEACHERS
 (II) FOR EIGHT MAJOR AREAS OF
 PRINCIPAL SUPERVISORY
 ACTIVITIES
 (Questionnaire - Section IV)

Activity	\bar{X} -I	\bar{X} -II	Rank I	Rank II
Demonstration lessons by specialists	3.15	4.52	1	5 **
Promote individual conferences	5.51	5.01	8	6
Co-ordinate general staff meetings	5.49	5.50	7	7
Visit classrooms and teaching areas	4.44	4.19	4	4
Provide for intra- and inter-school visits	3.56	4.09	2	3
Encourage and support staff projects	3.74	3.14	3	1
Arrange intra-school group conferences	4.82	3.94	5	2 **
Provide professional literature, bulletins and other instructional aids	5.28	5.58	6	8

** Practices showing significant differences at the .05 level as found by the Mann-Whitney "U" Test.

of the less innovative teachers, other assigned rankings should also be considered.

Both groups estimated the principal supervisory activity of visiting classrooms or teaching areas fourth in priority while promotion of individual conferences, coordinating and making provision for general staff meetings, and making available professional literature, bulletins, and other instructional aids were listed in the last three priorities. The more and the less innovative teachers differed in the mean rank of these practices also. The actual frequency, percentage frequency, and cumulative frequency rankings for these eight supervisory activities as estimated by both groups of teachers have been included as Appendix D.

Table XII illustrates the degree of agreement within the groups upon their ranking of the eight variables in Section IV. When both groups of teachers were combined to test agreement, the value of \underline{W} approached "0" more closely at 0.105 than when either group was tested separately. The more innovative teachers agreed within the group to a greater extent as $\underline{W} = 0.116$. The less innovative teachers showed still greater agreement than the more innovative teachers with a \underline{W} value of 0.142. Thus, there was greater tendency toward agreement within either group than for both groups taken together. The less innovative teachers tended to agree upon the rankings more closely than did the more innovative teachers.

TABLE XI

MANN-WHITNEY U'S AND NORMAL DEVIATES FOR
EIGHT MAJOR SUPERVISORY PRACTICES BETWEEN
THE MORE INNOVATIVE TEACHERS AND THE
LESS INNOVATIVE TEACHERS

Variable	U-Value	Z-Score	Standard Score Probabilities
Demonstration Lessons by Specialists	1118.00	-2.86	.00 *
Promote Individual Conferences	1356.60	-1.55	.06
Co-ordinate General Staff Meetings	1626.00	-0.07	.47
Visit Class- rooms and Teaching Areas	1551.00	-0.48	.32
Provide for Intra- and Inter- school Visits	1413.00	-1.24	.11
Encourage and Support Staff Projects	1373.00	-1.47	.07
Arrange Intra-school Group Conferences	1170.00	-2.58	.01 *
Provide Professional Literature, Bulletins and Other Instruct- ional Aids	1545.00	-0.51	.31

* Significant at the .05 level of confidence.

TABLE XII

DEGREE OF AGREEMENT WITHIN GROUPS
(Questionnaire - Section IV)

Group	Kendall's Coefficient of Concordance "W" *	Value of Chi Square	Conclusion
Less Innovative Teachers (N-39)	0.142	38.863	Significant **
More Innovative Teachers (N-84)	0.116	68.102	Significant **
Both Groups (N-123)	0.105	90.482	Significant **

* When the coefficient of concordance "W" equals 1, then the ranks assigned by each respondent are exactly the same as those assigned by each other respondent. When there is maximum disagreement, "W" equals 0.

** Significant at the .05 level of confidence.

Summary

The major importance of Section IV lies in the support which it displays for teacher expectations for the principal's supervisory role according to the degree of teacher innovativeness. The items assigned high priority by the more innovative teachers in Section IV also demonstrated a relatively stronger agreement by them in Section III than did the responses of the less innovative teachers. Such items involved encouragement for participation by the teachers in action research, staff projects, and group conference activities.

The less innovative teachers tended to give priority to activities which presented them with an opportunity to observe good teaching practices such as demonstration lessons and school visits without becoming involved on a more active basis. This trend to passivity was also indicated by the items under teacher expectations where they tended to differ significantly in agreement or even to disagree with the more innovative teachers. Such items are pre-school conferences, social meetings, and individual conferences after a demonstration lesson or directed visitation.

IV. RELATED AREAS OF CONCERN EXPRESSED BY THE TEACHERS

The teachers were asked to present their ideas relative to principal supervisory activities in Section V of the instrument. Approximately 50 per cent of both groups responded in considerable detail. A summary of their

expressions is set out in Table XIII which shows a broad divergence in the percentage of relative numbers of ideas which fell into each classification. Two areas of concern are relatively consistent between the groups as they expressed concern at approximately the same level for encouraging, helping, and supporting teachers, and for friendly, egalitarian behavior by the principal. Concern for principal activities in staffing and leadership functions differed by 10 per cent but it was mentioned frequently by both groups.

The other five areas of concern presented considerable contrast between the more innovative teachers and the less innovative teachers. These ideas are discussed since they support the general thesis of this study. Table XIV shows the numerical percentages and differences between the groups.

Of the 32 main ideas expressed by the nineteen less innovative teachers who responded to this part of the questionnaire, 26 per cent were classed as "meeting pupils' needs," 32 per cent as "meeting teacher expectations in evaluation procedures," 0 per cent as "providing information about new practices," and "encouraging teacher freedom to experiment," and 5 per cent as "principal-teacher cooperation and teamwork."

This compares with the forty-two more innovative teachers who responded with 67 main ideas. Of these, 14 per cent were related to "meeting pupils' needs," 10 per

TABLE XIII

PERCENTAGE COMPARISONS BETWEEN LESS INNOVATIVE TEACHERS (I) AND MORE INNOVATIVE TEACHERS (II) WHO EXPRESSED IDEAS IN EACH AREA OF CONCERN FOR THE PRINCIPAL'S SUPERVISORY ACTIVITIES
(Questionnaire - Section V)

Area of Concern	Teacher Respondents' Ideas as a Per Cent of the Sug- gestions Present in Each Area of Concern		Percentage Difference Between Groups
	I - (N=19)	II - (N=42)	
Staffing and Leadership Functions	15.6	10.3	5.3
Meeting the Pupil's Needs	15.6	8.8	6.8
Encourage Teach- ers - Help and Support	28.2	26.5	1.7
Meeting Teacher Expectations in Evaluation	18.8	5.9	12.9
Providing Inform- ation about New Practices	0.0	13.2	13.2
Permitting Teacher Freedom to Experiment	0.0	5.9	5.9
Principal's Behavior Patterns - Egalitarian, Friendly, Ally	18.8	19.1	0.3
Principal-teacher Teamwork and Co-operation	3.0	10.3	7.3
Totals	100.0 *	100.0 **	-

* Represents a total of 32 main ideas.

** Represents a total of 67 main ideas.

cent to "meeting teacher expectations in evaluation procedures," 21 per cent to "providing information about new practices," 10 per cent "encouraging teacher freedom to experiment," and 17 per cent to "principal-teacher cooperation and teamwork."

Further examination reveals percentage differences between the groups on the items above, respectively, to be 12 per cent, 22 per cent, 21 per cent, 10 per cent, and 12 per cent. The main differences appear to be in "meeting teacher expectations in evaluation procedures" and "providing information about new practices." These findings indicate a greater concern of the more innovative teachers with active involvement, on a broader scale in new practices, experimenting, and working in a cooperative manner with the principal. The less innovative teachers seem to be more concerned with evaluation and more formal type activities such as leadership and meeting pupil's needs.

Table XIV displays a comparison between these two teacher groups in terms of the percentage of respondents who made one or more suggestions in each class of major concerns for supervisory practices. The two areas of concern which again show the greatest percentage difference between the less innovative teachers and the more innovative teachers lies in "meeting teacher expectations for evaluation" and "providing information about new practices." They both have differences of approximately 22 per cent in the percentage of respondents who made one or more

TABLE XIV

PERCENTAGE COMPARISONS BETWEEN THE LESS INNOVATIVE TEACHERS AND THE MORE INNOVATIVE TEACHERS WHO RESPONDED WITH ONE OR MORE RESPONSES IN EACH CLASSIFICATION OF SELF-EXPRESSED AREA OF CONCERN FOR THE SUPERVISORY ROLE OF THE PRINCIPAL
(Questionnaire - Section V)

Area of Concern	Percentage of Concerns Expressed by Teacher Groups		Percentage Difference Between Groups
	I (N=19)	II (N=42)	
Staffing and Leadership Functions	26.4	16.6	9.8
Meeting Pupil Needs	26.4	14.4	12.0 *
Encourage, Help, and Support Teachers	47.4	42.9	4.5
Meeting Teacher Expectations in Evaluation Procedures	31.6	9.5	22.1 *
Providing Information About New Practices	0.0	21.4	21.4 *
Encouraging Teacher Freedom to Experiment	0.0	9.5	9.5 *
Friendly, Egalitarian, Ally-type Behavior by Principal	31.6	30.9	.7
Principal-Teacher Co-op., and Teamwork	5.3	16.6	11.3 *

* Areas of concern displaying distinctly contrasting views.

suggestions in each class.

In general, the analysis of Section V has indicated considerable support for the general thesis of this study. Five ideas, as these were expressed by the less innovative teachers and the more innovative teachers, illustrated differences of greater than 10 per cent in their major areas of concern. The number of teachers who expressed concern for supervisory practices related to evaluation procedures and information about new practices not only differ widely but have been seen in Table XIV to be in opposite directions according to the innovativeness of the teachers. These findings will be discussed in Chapter VII along with the general implications that can be drawn from this study.

V. SUMMARY OF CHAPTER VI

1. The distribution of instructional innovativeness among teachers based upon the number of innovative practices used appears to approach a normal distribution -- but after collapsing the categories, there were twice as many teachers classified as more innovative than as less innovative.
2. Twelve variables related to teacher expectations for the principal's supervisory role displayed significant differences between the more innovative teachers and the less innovative teachers. This represents 20 per cent of the practices listed in the questionnaire.
3. Most of the practices that showed a significant difference were in the sections on "Action Research," "General Staff Meetings," and "Individual Conferences."
4. Where there were significant differences between the teacher groups relative to the principal's activities, the more innovative teachers were

more accepting of supervisory activities than were the less innovative teachers. At the same time, the less innovative teachers displayed less decisiveness than did the more innovative teachers.

5. Significant differences were found between the estimated rankings of more innovative teachers and less innovative teachers for principal activities in the areas of "Demonstration lessons by specialists" and "Arranging intra-school group conferences."
6. The teacher comments from Section V of the questionnaire appear to support the general thesis of this study. Five of the eight major areas of concern expressed by the teachers, who were grouped according to innovativeness, were found to display large differences between the groups.

CHAPTER VII

DISCUSSION OF THE FINDINGS

Introduction

This chapter discusses the areas of significant differences as they have been presented in Chapter VI and presents the derived implications from the analyses of the data. But since this study indicates the differences in teacher expectations for the elementary school principal's role from a small population, care must be taken to avoid unrealistic generalizations. Attention is drawn to the delimitations outlined in Chapter IV. Limitations related to the validity and interpretation of the questionnaire must be considered. And in addition it should be noted, when applying these findings, that there were twice as many more innovative teachers as less innovative teachers.

As has been indicated in the last chapter, the more innovative and the less innovative teachers were shown to differ significantly upon 20 per cent of the practices considered in Section III of the instrument. These two groups also differed significantly in the rankings of 25 per cent of the supervisory practices presented in Section IV of the instrument. However, it is obvious that the differences in most cases are in degree of agreement or disagreement. This concept provides the structure for the detailed discussion which follows.

I. AREAS OF SIGNIFICANT DIFFERENCES IN DIRECTION OF AGREEMENT

A rather large proportion of the less innovative teachers did not agree with principal visitation to determine the quality of teaching. This group also indicated considerable concern over the procedures used in the evaluation of teachers by the principal. Although this defensive reaction may have many causes such as the less innovative teachers being subjected to more extensive evaluation than the more innovative teachers, perhaps the principal could be more effective in meeting the less innovative teachers' expectations by using other methods of supervision.

Several of these methods have been outlined in Chapter II. They include indirect approaches and appropriate in-service programs which result from the needs of the teachers involved. For many of the less innovative teachers, teaching area visitation cannot be recommended for effective supervision. Accordingly, adjustments must be made in the supervisory program.

A similar conclusion must be drawn for principal-teacher conferences after a demonstration lesson or directed visitation. The growing specialization of teachers and the complexity of the principal's task may encourage a negative reaction by the teachers to the principal conference. In contrast, the more innovative

teachers expressed strong desires for conference-type activities. The teacher's desire for independence, the specialization of teachers, and the greater complexity of the principal's role may largely account for the difference of opinion by the two groups with regard to a conference following a demonstration lesson.

Since the less innovative teachers do not favour the conference activities (twice as many of these disagreed with this practice as compared to more innovative teachers) the principal must consider alternative methods of improving instruction in their teaching areas. In-service activities, demonstration lessons, and inter-school visitation provide considerable promise as these have been outlined in Chapter I. The principal can influence such activities but the primary prerequisite is that they be endorsed by the teacher groups. The teachers must recognize the need and then the principal can stimulate, assist and support the program development.

The more innovative teachers may also respond to the above techniques. But because of their strong support for conference activities, co-operative approaches such as group evaluation and team work can be recommended for their improvement of instruction. Such progressive, egalitarian approaches tend to involve all staff members including the principal thereby improving communications, rapport, and general morale. The more innovative teachers expressed a strong desire throughout the study for principal

supervisory activities of this type. Through such involvement, the more innovative teachers may feel that they can retain greater direction over their own professional activities. Principal encouragement of group conference and subject level conference activities may produce a dynamic movement for responsible innovation to improve instruction among the more innovative teachers.

Items related to general staff meetings indicated strong teacher opinions. That the more innovative teachers strongly supported the setting up of staff agenda committees is not surprising. This reaction re-emphasizes their greater desire to be involved on a group basis in decision-making and other professional activities at the instructional level. At the same time, less innovative teachers who tended to disagree, may regard such a practice as another infringement upon their more formal preparation and teaching time. As this may be closely related to their reaction toward pre-school conferences and social meetings, this attitude will be discussed in the next section.

The section related to "Action Research" contained more items that were significantly different in agreement than any other area. Even though significant differences existed on over 40 per cent of these variables, it is remarkable that the majority of less innovative teachers agreed that the principal should be involved in these activities of evaluation, experimentation, and action research. But the less innovative teachers were also more

indecisive concerning these activities. When this finding is not supported by teacher suggestions from Section V of the questionnaire, some doubt is cast upon the real desires of these less innovative teachers in regard to these variables. Possibly, even though they agree that the principal should be involved in these activities, their knowledge and abilities in this area are severely limited. If this is so, the principal must use every resource available to stimulate and interest the teachers toward greater knowledge of educational innovations. Other practices such as demonstration lessons and inter-visitation should be encouraged. Through a variety of these more formal supervisory methods, preferably presented by peer and influence figures, the less innovative teachers may become familiar and even proficient in the use of such contemporary methods.

The more innovative teachers' strong disapproval of their failure to receive information when parents complained, supports their apparent desire for information, involvement, and the desire to share in decision-making. But again the less innovative teachers' responses were different largely because of indecision and a more diverse distribution of responses. It seems that many less innovative teachers avoid involvement in activities that are not directly applicable to the teaching situation or that tend to extend beyond meeting the immediate needs of the pupils and of themselves.

II. AREAS OF SIGNIFICANT DIFFERENCES AND NON-AGREEMENT

The strongest conflict of opinion between the more innovative and the less innovative teachers in this study was detected on the variable that a principal should hold pre-school conferences for orientation purposes. A majority of less innovative teachers disagreed with this item. They also displayed considerable disagreement with principal encouragement of social meetings. These items may all be related to the element of time. They involve additional activity most of which presently occurs outside of regular school hours at the elementary school level. In any case, the implications are clear. If the supervisor of instruction hopes to reach the less innovative teachers more effectively, he should attempt to do it during the school year and even during regular school hours. This indicates a need for principal freedom from other duties during a large part of the school day and proportionate teacher freedom to work together and with the principal as a part of his regular school activities. Thus, although the more innovative teachers appear willing to contribute their efforts to conference activities before school opens or during the school year, this is less true of the less innovative teachers.

Not only teacher agreement, but also their actual enthusiasm for innovation may be an important factor in the implementation of innovations at the school level. If this

enthusiasm is related to strength of agreement upon the practices displaying a significant difference, then these findings indicate that more innovative teachers tend to accept changes suggested by the principal. New programs, trial curriculums and other innovations which normally require additional effort for successful implementation seem more likely to succeed if they are developed by the more innovative teachers who experiment with and use a number of other innovations.

The findings in this study indicate that high priority has been assigned by both groups of teachers to activities related directly to instructional improvement at the classroom level. But closer examination of the rankings assigned by groups revealed the significant differences between the more innovative and less innovative teacher groups concerning demonstration lessons and group conferences.

Since the less innovative teachers tended to rank arranging demonstration lessons by specialists first, followed by providing for intra-school and inter-school visits second, it appears that they may prefer to observe practices which they can either accept or reject. They prefer this to becoming involved in group work. The more innovative teachers' rankings indicate that they value more active exchange of ideas through conference and project-type activities. These attitudes by the two groups of teachers are supported by the findings from Section V of the instrument.

Although teachers endorsed the consultant performed demonstration lesson, this trend has been found to be more accurate for the less innovative teachers. The difference may be attributable to several factors, but it probably reflects a change in the attitudes of the more innovative teachers. They seem to prefer a more experience-oriented atmosphere in which to grow professionally.

The contrasting views of teachers as they have been presented from Section V of the instrument also reflect an attitude change. Evidence shows that the more innovative teachers are concerned about permitting teacher freedom to experiment and providing information about new practices. The less innovative teachers show greater concern with meeting teacher expectations in evaluation. Such expectations support the generally stronger agreement among the more innovative teachers for principal activities in supervision at the school level.

III. OTHER IMPLICATIONS

The vast majority of more innovative teachers strongly supported encouragement by the principal in the use of a variety of teaching methods, experimentation with new teaching methods, and research activities based upon educational problems in the classroom or teaching area. The principal probably should continue to support research efforts from within more innovative teacher ranks and work to develop desirable changes through them. Such support

for the more innovative teacher promotes the desire to experiment and use new practices. The less innovative teachers can also benefit from such guidance and administrative support provided the school supervisor can promote potential and be tolerant of failure and other dislocations.

The more innovative teacher comments in Section V, the ranking of practices by the more innovative teachers, and the strong agreement by these teachers upon the concepts of encouragement and group conference activities indicate support for a collegial relationship between the principal and the staff. This would seem to indicate that principal involvement as a member of the teaching team is most important to the improvement of instruction and the development of "esprit de corps" within the school. Instructional improvement can be enhanced by the egalitarian behavior of the principal.

Several general tendencies between responses of the less innovative teachers and the more innovative teachers for their expectations of the principal's supervisory role have been noted in the findings.

The views of the more innovative teachers were expressed more strongly on all but one of the variables. This group of teachers also tended to agree more frequently that the principal should perform these practices than did the less innovative teachers. This finding is particularly useful to the principal and to the teachers. If this

stronger and more frequent agreement among the more innovative teachers is accurate, they may expect greater action and involvement from the principal at the instructional level than do the less innovative teachers. Because of this strength of opinion, the principal could attempt to develop this potential for decision-making at the instructional and other levels where such ability is either demonstrated or interest has been shown. By providing such an opportunity and considering the strong influence of teachers upon other teachers, desirable innovative practices could be disseminated more quickly and greater congruency of teacher opinions concerning responsible innovation could be encouraged.

The less innovative teachers were observed to be more indecisive concerning their views upon principal activity in various areas of supervision. Such indecision may indicate less desire to make decisions, or the less innovative teacher may actually tend to be less able to make decisions. In any case, the principal must consider this factor while he supervises for the improvement of instruction. It may be necessary in the case of some less innovative teachers to be more direct and formal in supervision. It may also be reasonable to meet the expectations of more innovative teachers, and thus influence the less innovative teachers toward acceptance of these activities.

Considerable lack of agreement was found within the responses of the more innovative teachers. But the less

innovative teachers tended to produce greater agreement within the group when they were asked to rank the supervisory practices which they considered to be more helpful. Such evidence suggests the greater need for individualized supervision at the school level among the more innovative teachers. The principal may be able to adjust his supervisory methods to more closely approximate the expectations of the individual teacher. This action becomes paramount if the supervisory goal is the introduction or development of an educational innovation.

The elementary school principal appears to be in a strong position for the determination and encouragement of innovativeness among his staff. He has special knowledge of the teachers which includes knowledge of the number of new practices which they use. He has considerable influence over mechanical and information resources that are available to them. His style of leadership is adaptable to the situation, the needs of the staff, and his perception of his role as it is partially determined by forces that are internal and external to the school environment. With increased knowledge of the characteristics and expectations of both the more innovative and the less innovative teachers, the principal may be able to reinforce the more constructive perceptions of these teacher groups. Such support would help in the determination and implementation of desirable practices.

IV. CONCLUSIONS

The more innovative teachers and the less innovative teachers differ significantly in their expectations for the principal's supervisory role at the elementary school level in approximately one out of every four supervisory practices. Although the difference is often a matter of degree, the more innovative teachers tend to agree both more frequently and more strongly with the principal's activities where a significant difference has been found.

The less innovative teachers were found to be much more indecisive on these variables which indicated significant differences in expectations between the groups. This tendency among less innovative teachers must be considered in all of its ramifications relevant to supervision by the principal, particularly with reference to decision-making at the instructional level.

Also, since the less innovative teacher tends to avoid group conference activities while the more innovative teachers tend to be favourably inclined toward these activities, certain innovations requiring social intercourse must either be avoided with the less innovative group or given strong leadership and direction if they are attempted. At the same time, the more innovative teachers should respond favourably under such conditions. Encouragement, support, and leadership should be demonstrated by the principal in an egalitarian manner in order to provide

effective supervision.

The less innovative teachers were found to be more firmly opposed to supervisory activities that occur outside of the regular school hours than were the more innovative teachers. So supervisory activities where the principal desires to be effective with the less innovative teachers must be reconsidered as far as the timing of the practice and the roles of the group members are concerned.

The diversity within both groups of teachers relative to their agreement or disagreement with specific supervisory practices and their ranking of major supervisory practices indicates a definite need for supervision at the school level which is more closely related to the individual teacher. Such supervision by the principal would have greater transfer value to the teacher-pupil instructional situation.

Supervision at the school level must provide an organization that is flexible and promotes the development and growth of teachers according to their needs and characteristics such as innovativeness. This quality is one of the many which must be considered. However, with the trend toward change prevalent in our schools, it may be one of the most important qualities in the selection of teachers for specific purposes and in the effective supervision of the more innovative teacher and the less innovative teacher.

V. SUMMARY OF DISCUSSION

1. The differences in expectations for the principal's supervisory role are largely a matter of degree. But trends toward indecisiveness and less acceptance for certain activities of the principal must be considered in the supervision of the less innovative teachers. Trends for stronger agreement with activities such as group conferences and projects indicate the need for greater activity in these areas for the more innovative teachers.
2. The school principal should consider the provision of temporary and flexible structures which will permit the individual teacher to grow professionally. From in-service, experimental and problem-solving activities the teacher may be able to select new practices that are conducive to learning in his own teaching area.
3. Support and encouragement by the principal-supervisor is necessary if the more innovative teachers' expectations are to be met. Additional help should be considered for the less innovative teachers in terms of leadership and opportunities to view good innovative practices in progress. This assistance should be considered for the less innovative teachers -- but during the regular school term.
4. Informal, participative methods of supervision must be considered for the more innovative teachers. There seems to be little doubt that this would also benefit the less innovative teachers when it can become a part of the daily schedule.
5. Generally, supervisory methods used by the principal are changing. Teacher inter-action, bringing about exchange of ideas and self- or group evaluation, is more acceptable to the more innovative teachers than to the less innovative teachers.

Chapter VIII will be used to summarize the study and the findings. Conclusions and recommendations will be presented along with the suggestions for further study that have been indicated as this study developed.

CHAPTER VIII

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This chapter includes a summary of the study and recommendations for further study.

I. SUMMARY OF THE STUDY

The theory underlying this thesis was that teacher expectations for the supervisory role of the principal are often incongruent within the teaching body according to the degree of innovativeness displayed by the teacher. It was assumed also that teachers classified according to degree of innovativeness disagreed considerably on their estimated rank of importance for major supervisory activities used to improve instruction, by the elementary (K-8) principal. Innovativeness was measured by means of the number of new practices that a teacher used in relation to the number of practices available and the number of relatively new practices used by other teachers.

The review of the literature was presented to illustrate the nature and functions of supervision of instruction. It was also attempted to review research that indicated teacher and principal attitudes toward supervision and to illustrate the need for accurate perception of teacher expectations by the principal. The processes, persons, and strategies for change were reviewed briefly to

relate these concepts to instructional improvement at the classroom level. The behavior of the principal in the support or encouragement of innovative practices has been integrally related to supervision of instruction. Since the behavior of the principal in facilitating change at the school level is crucial, the need for further delineation of teacher expectations to provide some direction and guidance in the selection, development, and evaluation of instruction was outlined. The desirability of developing commonly accepted supervisory techniques for improvement of instruction and the support of innovation was developed and became the essence of this study.

The purpose of the study was to investigate and compare the expectations of the less innovative and the more innovative elementary school teachers on items closely related to supervision and improvement of instruction by the principal. In order to accomplish this, the null hypothesis was used throughout the study to determine the items and practices upon which a significant difference could be found between the responses of the teacher groups.

A questionnaire containing five sections was distributed to all of the teachers who taught over 50 per cent of the time in a smaller Ontario city. Section I of this questionnaire produced demographic data which was used to describe the population sample, Section II produced a ratio for innovativeness based upon the practices used by each teacher, and Section III contained sixty-one

previously developed statements of supervisory practices in which a principal might participate to facilitate the improvement of instruction. Section IV contained eight supervisory practices which required teachers to rank, in the estimated order of importance, the practices which they considered most valuable to assist them in the improvement of instruction. Section V provided an opportunity for non-directed expressions by the teachers in relation to supervisory practices.

Section III of the questionnaire provided the most important information. The respondents were asked to indicate their view on each item by selecting one of the five response categories from strongly agree, agree, undecided, or disagree to strongly disagree.

For the purpose of this study, two groups of teachers were defined according to their degree of innovativeness. This dual classification was investigated for each of the supervisory practices in Section III and IV of the questionnaire and the results of the statistical analyses were compared and discussed.

The statistical analysis for Section III (Teacher Expectations) was completed using the t test for two independent samples and Welch's - T Prime Approximation for variance test. The Mann-Whitney U test was used to compare the rank order of importance for the eight practices in Section IV. A computer program was used to provide mean ranks for ranking within the groups. Kendall's Coefficient

of Concordance W provided measures of agreement for the ranking of the eight supervisory practices within each group and the significance was determined using chi square.

The .05 level of confidence was accepted throughout the study to determine significant differences between the expectations of the less innovative teachers and the more innovative teachers.

II. SUMMARY OF FINDINGS

Two hypotheses formed the basis for this study and the findings have been summarized in relation to these hypotheses.

Hypothesis I.

When teachers are classified according to their innovativeness, there will be no significant difference between the groups in their agreement upon the items related to teacher expectations for the principal's supervisory role.

Statistical finding. This hypothesis was rejected.

Comments. There were significant differences between the less innovative teachers and the more innovative teachers in their expectations for the supervisory behavior of the principal as these have been indicated in response to items in the instrument. A total of twelve items were significantly different at the .05 level of confidence in Section III. Although one item was significantly different

in each of the categories of "Teaching Area Visitation" and "Miscellaneous," the vast majority of the items were from the categories of "Individual Conference" (25 per cent), "General Staff Meetings" (40 per cent), and "Action Research" (43 per cent). No significant differences between the group expectations of the more innovative teachers and the less innovative teachers were found in the sections on Bulletins and Other Aids or Demonstration Teaching and Scheduled Visitation.

Hypothesis II

No significant differences exist in the rank order of importance of major areas in supervisory practice as expressed by teachers classified according to their degree of innovativeness.

Statistical finding. This hypothesis was rejected.

Comments. There were significant differences in the rank order of importance for these major areas in supervision as they have been expressed by the less innovative teachers and the more innovative teachers. Two practices were related to the degree of innovativeness of the teachers. These were "Arranging to have demonstration lessons taught by specialists" and Arranging group conferences among teachers within the school." The less innovative teachers tended to prefer the former activity while the latter was given first priority by the more innovative teachers. These practices represented 25 per cent of those which the teachers

were asked to rank.

III. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The conclusions presented here were arrived at on the basis of evidence from the present study. These conclusions must be viewed carefully with due regard for the limitations and assumptions inherent in this study. There is some evidence to suggest the following:

1. The innovativeness of teachers is related to their expectations for the supervisory activities of the principal in 20 per cent of the actual practices outlined in this study. It is related to 25 per cent of the rankings assigned by the teachers to major areas of supervision of instruction.

2. More innovative teachers tend to agree more strongly and more frequently on the significantly different variables than do the less innovative teachers.

3. Indecision with regard to teacher expectations for the principal's supervisory role in the improvement of instruction tends to be displayed more frequently by the less innovative teachers.

4. There is considerable lack of agreement upon the principal's supervisory role within teacher groups classified according to innovativeness. But this lack of agreement is a less important factor for the less innovative teachers than it is for the more innovative teachers.

5. The less innovative teachers differ from the more innovative teachers most strongly, in their expectations for the principal's role, when the supervisory activities involve them beyond the limits of the regular school day or school term.

Recommendations

The findings of the present study seem to suggest several implications for the school principal as a supervisor of instruction.

1. Where teachers are perceived to be more innovative, supervisory practices should be considered that permit adaptation to the situation. This could permit greater involvement in decision-making at the instructional level, greater encouragement for conference activities, provision for positions of influence with their peer group, and greater freedom to experiment and display their talents for the improvement of instruction at and beyond the school level.

2. The principal should consider supervision for the improvement of instruction in terms of the major supervisory methods ranked in priority by the less innovative teachers and the more innovative teachers. While noting the individuality displayed within both groups of teachers, whenever possible he could attempt to involve the less innovative teachers in demonstration lessons and inter-school visitations before conference-type activities. The more innovative teachers could be encouraged to play an

active role in projects, conferences, and intra-school visits.

3. Innovative practices and technology should be introduced by the principal only when the needs of the individual teacher and his expectations for the principal's role in supervision have been studied and understood.

4. The introduction of activities which require collaboration and teamwork should be attempted after the teachers have understood the change and recognize the need for its implementation. Then it could be introduced in cooperation with the more innovative teachers, who might later demonstrate the method to less innovative teachers.

5. The principal should consider making the supervision of instruction more effective by working to provide sufficient principal and teacher organizational time within the school organization. In this way mutually desirable practices in supervision could be encouraged without placing unreasonable demands upon the teacher's own professional and personal schedule.

6. The principal must continue to perceive differences in teacher and other group expectations for his role in the improvement of instruction. He should consider adapting his supervisory methods in accordance with new research findings.

IV. SUGGESTIONS FOR FURTHER STUDY

Replications of this study should be completed on a broader scale in Ontario and other provinces to determine the reliability of these findings for teachers beyond this small population. Studies of other teacher characteristics which may help to determine individual teacher expectations for the principal's supervisory role would also be valuable.

Investigations of the relationship between professional and personal data beyond innovativeness and teacher group expectations should help the principal to focus upon the individual teacher and to provide more specific supervision of instruction.

Innovativeness may be related to the selection of teachers for their positions or for the development of new programs. If so, how do teacher satisfaction, efficiency, morale and other hoped for outcomes of new programs compare between the less innovative and the more innovative teachers at the various stages of development of such programs? Do the expectations of the more innovative teachers and the less innovative teachers for the principal's supervisory role change over time in such a situation?

The following questions also deserve investigation: If congruency of teacher and principal expectations does improve the school program, in what way does this occur? What supervisory techniques can be most effectively employed by the principal to promote truly individualized supervision for the improvement of instruction?

B I B L I O G R A P H Y

BIBLIOGRAPHY

A. BOOKS

- Adelson, Marvin. "Educational Ends and Innovational Means," Inventing Education for the Future, Hirsch, W. and Colleagues (eds.), San Francisco: Chandler, 1967, pp. 240-251.
- Bennis, W.G., K. Benne, and R. Chin. The Planning of Change: Readings in the Applied Behavioral Sciences. New York: Holt, Rinehart and Winston, 1961.
- Campbell, R., J. Corbally and J. Ramseyer. Introduction to Educational Administration. Second edition, Boston: Allyn and Bacon, Inc., 1963.
- Carlson, R.O. Adoption of Educational Innovations, The Centre for the Advanced Study of Educational Administration, University of Oregon, Eugene, 1965.
- _____. "Barriers of Change in Public Schools," Change Processes in the Public Schools, R. Carlson et. al. (eds.), Centre for the Advanced Study of Educational Administration, University of Oregon, Eugene, Oregon, 1965.
- Curtin, James. Supervision in Today's Elementary Schools. New York: The Macmillan Company, and London: Collier-Macmillan Limited, 1964.
- Davitz, J.R. and Lois Jean Davitz. A Guide for Evaluating Research Plans in Psychology and Education. Teachers College, Columbia, 1967.
- Etzioni, A. Complex Organizations: A Sociological Reader. New York: Holt Rinehart and Winston, 1964.
- Evans, N. and R. Neagley. Handbook For Effective Supervision of Instruction. Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1964.
- Ferguson, G.A. Statistical Analysis in Psychology and Education. New York: McGraw-Hill, 1966.
- Gwynn, J.M. Theory And Practice of Supervision. New York and Toronto: Dodd, Mead and Company, 1961.

- Harris, Ben M. Supervisory Behavior in Education. Englewood Cliffs, New Jersey: Prentice-Hall Inc., 1963.
- Heathers, Glen. "Influencing Change at the Elementary Level," Perspectives On Educational Change. R.I. Miller (ed.), New York: Appleton-Century-Crofts, 1967, pp. 23-52.
- Hicks, Hanne J. Educational Supervision In Principle and Practice. New York: The Ronald Press Company, 1960.
- Kaplan, Abraham. The Conduct of Inquiry. San Francisco: Chandler Book Company, 1964.
- Lane, W.R., Ronald Corwin, and William Monahan. Foundations of Educational Administration: A Behavioral Analysis, New York: The Macmillan Company, 1967.
- Lindman, Erick L. "The School Administrator and Educational Innovation," Inventing Education For The Future. W. Hirsch and Colleagues (eds.), San Francisco: Chandler Publishing Company, 1967.
- Lionberger, Herbert F. Adoption of New Ideas and Practices. Ames, Iowa: Iowa State University Press, 1960.
- Lippitt, R. and Colleagues. "The Teacher as Innovator, Seeker, and Sharer of New Practices," Perspectives On Educational Change. R.I. Miller (ed.), New York: Appleton-Century-Crofts, 1967.
- Miles, M.B. (ed.). Innovation In Education, New York: Teachers' College, Columbia University, 1964.
- Pellegrin, R.J. "Educational Organizations and Problems of Innovation," Change and Innovation. (Carson, editor) Seminar Series for School Administrators, Department of Educational Administration, University of Calgary, Alberta, 1967, pp. 33-47.
- Rogers, E.M. Diffusion of Innovations, New York: The Free Press, and London: Collier-Macmillan Limited, 1962.
- _____. "What Are Innovators Like?" Change Processes In The Public Schools. (Carlson et al.) (eds.), Centre for the Advanced Study of Educational Administration, University of Oregon, Eugene, Oregon, 1965, pp. 253-254.
- Selltiz, Claire et. al. Research Methods in Social Relations. New York: Holt, Rinehart and Winston, 1959.
- Siegel, Sidney. Non-Parametric Statistics for the Behavioral Sciences. New York: McGraw-Hill, 1956.

Shaplin, J.T. and H.F. Olds. Team Teaching. New York: Harper and Row Publishers, 1964.

Swearingen, M.E. Supervision of Instruction, Boston: Allyn & Bacon Inc., 1962.

Trump, J. and D. Baynham. Focus On Change: Guide To Better Schools. Chicago: Rand McNally and Company, 1961.

Wiles, J. "Supervision," Encyclopedia of Educational Research. New York: Macmillan Company, 1960, pp. 1445-1447.

Woods, Thomas E. The Administration of Educational Innovation. Bureau of Educational Research, School of Education, University of Oregon, Eugene, Oregon, May, 1967.

B. PERIODICALS

Anderson, B.D. and A.F. Brown. "Who's A Good Principal?" The Canadian Administrator, 6:3 (December, 1966) pp. 9-12.

Chesler, M., R. Schmuck and R. Lippitt. "The Principal's Role in Facilitating Innovation," Theory Into Practice, 2:5 (December, 1963) pp. 269-277.

Enns, F. "Supervision: A Rationale." The Canadian Administrator, 2:7 (April, 1963) pp. 27-30.

_____. "Perception in the Study of Administration," The Canadian Administrator, 5:6 (March, 1966) pp. 23-26.

Erickson, D.A. "The Principalship and the Principal: From Cubberley to the Computer," Program and Personnel. The Alberta Principals Leadership Course, E. Miklos (ed.), 1965, pp. 1-13.

Flanders, Ned A. "The Administrator and Instruction," The Elementary School Journal, 66:1 (October, 1965) pp. 28-35.

Griffiths, D.E. "The Elementary School Principal and Change in the School System," Theory Into Practice, 2:5 (December, 1963) pp. 278-284.

Hansen, K.H. "Design for Decision," National Association of Secondary School Principals Bulletin, 322:51 (November, 1967) pp. 105-113.

- Hobbs, Daryl J. "The Need for Planned Change In Rural Sociology," Theory Into Practice, 5:1 (February, 1966) pp. 20-24.
- Holdaway, E. and J. Seger. "Change and the Principal," The Canadian Administrator, 7:5 (February, 1968) pp. 17-20.
- Ingram, E.J. "Supervising The Instructional Program: The Role of the Principal," C.S.A. Bulletin, 6:5 (June, 1967) pp. 23-41.
- _____. "The Process of Change," The C.S.A. Bulletin, 5:4 (May, 1966) pp. 33-51.
- "Keeping Abreast In Research," Phi Delta Kappan. 49:1 (September, 1967) p.57.
- MacKay, D.A. "The Principalship: A Pivotal Role In Communications," The Alberta Principals' Leadership Course, F. Enns (ed.), 1963, pp. 31-38.
- _____. "Inservice Education - A Strategy for Staff Development," The Alberta Principals' Leadership Course, F. Enns (ed.), 1964, pp. 65-74.
- MacKinnon, A.R. "Towards More Effective Communication in Supervision," F. Enns (ed.), The Canadian Administrator, 2:5 (February, 1963) pp. 17-20.
- Robinson, N. "Principal and Teacher Supervisory Relationships: Problems and Perspectives," E. Miklos (ed.) The Alberta School Principal, 1965, pp. 55-60.
- Rogers, E.M. "Categorizing the Adopters of Agriculture Practices," Rural Sociology. 23:345-354, December, 1958.
- Seymore, H.C. "The Principal as the Instructional Leader," N.A.S.S.P. Bulletin, 51:89-97 (November, 1967).
- "Teacher Evaluation," The National Elementary School Principal, 43:2 (November, 1963) pp. 3-67.
- Trask, Anne. "Principals, Teachers and Supervision: Dilemmas and Solutions," The Administrator's Notebook, 13:4 (December, 1964) pp. 1-4.
- Wiens, John. "Change and the Classroom Teacher," The Canadian Administrator, 7:4 (January, 1968) pp. 13-16.
- Ziolkowski, E.H. "Practices In The Supervision of Instruction," The Canadian Administrator, 5:1 (October, 1965) pp. 1 - 4.

C. UNPUBLISHED MATERIALS

- Cheal, John E. "The Role Conflict in the Principalship of the Composite High School," Unpublished Master's thesis, University of Alberta, Edmonton, 1958.
- Hooge, H.H. "The Role of the Elementary School Principal in British Columbia," Unpublished Master's thesis, University of Alberta, Edmonton, 1967.
- Hyrnyk, N.P. "Correlates of Professional Role Orientation in Teaching," Unpublished Doctoral dissertation, University of Alberta, Edmonton, 1966.
- Malmberg, H. "The Principal as a Supervisor of Instruction in the Regional School Districts of New Brunswick." Unpublished Master's thesis, The University of Alberta, Edmonton, 1959.
- McGillivray, W.R. "A Survey of Supervisory Assistance as Perceived by Beginning Teachers in Selected Urban High Schools in Ontario," Unpublished Master's thesis, The University of Alberta, Edmonton, 1966.
- Morin, L.H. "The Principal's Perception of His Role." Unpublished Master's thesis, The University of Alberta, Edmonton, 1964.
- Wiens, John. "Attitudes, Influence and Innovativeness: An Analysis of Factors Related to Innovativeness in Educational Organizations," Unpublished Doctoral dissertation, University of Alberta, Edmonton, 1967.
- Yakimishyn, Michael P. "A Study of the Relationship Between Selected Characteristics and the Innovativeness of Junior High School Teachers," Unpublished Master's thesis, University of Alberta, Edmonton, 1967.

D. OTHER REFERENCES

- Andrews, J.H.M. "Who Shall Supervise?" Lecture delivered at CEA. Short Course, Banff, Alberta, May, 1960 (Mimeographed).

Clark, D.L. and E. Guba. "An Examination of Potential Change Roles in Education," Paper presented to the Symposium on Innovation in Planning School Curricula, Airlie House, Virginia, October, 1965 (Mimeographed).

Clarke, S.C.T. "The Psychology of Change." Inservice Education for Teachers. Ingram and Hrynyk (ed.), Improvement of Instructional Series No. 6, The Alberta Teachers' Association, Barnett House, Edmonton, Alberta (August, 1963) pp. 9-15.

Fisher, H.K. "Implementing Innovation: The Challenge for Supervision," CEA Short Course (June, 1966), Banff, Alberta (Mimeographed).

Ontario Institute for Studies in Education, "Planning and Implementing Change in Ontario Schools," A Committee Report, Office of Development, 1967 (Mimeographed).

A P P E N D I C E S

APPENDIX A₁

Department of Educational
Administration
The University of Alberta
Edmonton 7, Alberta

February 14, 1969

Mr. D. B. Deacon,
Superintendent of Elementary Education,
Guelph District Board of Education,
385 Woolwich St.,
Guelph, Ontario

Dear Mr. Deacon:

As you are aware, I am conducting a research study in connection with my work at the University of Alberta. My thesis proposal has been accepted by my advisor, Mr. J. Small, and a questionnaire has been adapted to obtain the necessary information from the teachers on the topic Teachers' Expectations of the Principal's Supervisory Role. It is the specific purpose of this questionnaire to select the more innovative and the less innovative teachers and to compare their expectations for the supervisory role so that more effective principal supervision may be possible.

I have selected the Guelph Elementary Public School System for the study and the total population of these teachers will be included. I am therefore asking your formal permission to distribute the questionnaires to all of the elementary schools upon receipt of your response. The earliest possible date that the kit including the questionnaires could be in the principal's hands would be Friday, February 22 and I would appreciate their return before the winter recess.

Please find enclosed a copy of the proposed questionnaire, the letter to the principal, and the letter to the teacher. If you have any suggestions for revision, please return them to me and I shall attempt to accomodate your wishes. Thank you again for your cooperation.

APPENDIX A₂

Department of Educational
Administration
The University of Alberta
Edmonton 7, Alberta

February 20, 1969

Mr. M. Yakimishyn, M.Ed.
603 Main Street,
Swan River, Manitoba.

Dear Mr. Yakimishyn:

I am presently a graduate student in Educational Administration at the University of Alberta where I am engaged in a study, Teacher Expectations for the Principal's Supervisory Role, as a part of my studies toward a degree of Master of Education.

Because my study is rather closely related to yours in 1967, and I require a measure of teacher innovativeness, I would like your permission to adapt your questionnaire for my purposes. You will be interested to know that your thesis was instrumental in my selection of a study area.

Assuming your cooperation, I would be most appreciative of any further information that might be helpful or informative in the adaptation of your instrument to obtain an overall score of innovativeness. I do intend to drop the abstractions from your teacher practice section and use an open-ended section for teacher additions. As you will now be aware, it is the degree of innovativeness of teachers that I am comparing to their expectations concerning specific supervisory practices.

Thank you for your consideration of this matter.

APPENDIX A₃

Department of Educational
Administration
The University of Alberta
Edmonton, Alberta

February 28, 1969

Dear Fellow-Principal:

As you have already been consulted by your superintendent concerning the enclosed questionnaire, I shall not elaborate at any length. However, I do wish to thank you in advance for the approval and assistance you have offered. In your busy schedule, I realize this is just another "thorne in your side" but may I suggest that it may prove to be beneficial to you and your staff - immediately and in the future. This research represents one more small step along the way to better understanding and mutual professionalism among the key educators - the teacher and the principal.

You will find enclosed sufficient questionnaires for each teacher in your school who teaches most of the time. Principals and supervisors are not included. You will do me a great service by distributing and providing for the completion (voluntarily) of these questionnaires. May I suggest that they could fulfill an in-service purpose if they were completed at a regular staff meeting - with discussion for clarification only - and then collected before further discussion? The name of the school has been placed on each questionnaire but no other identification should be made. Even this identification is only so that I may know when most of the returns have been made to me.

I wish to remind you that this information is for data that will assist in the completion of my thesis. It is superfluous and unrelated to any material that may be required by your local senior administrators. Please clarify this for your staff and accept my humble thanks for performance of a task that I cannot complete without your assistance.

Your earliest attention to this matter would be most appreciated. Best wishes for a most successful and gratifying year. I am looking forward to meeting with all of you next September.

APPENDIX A₄

Department of Educational
Administration
The University of Alberta
Edmonton 7, Alberta

March 21, 1969

Dear Fellow-Teachers:

Many thanks for your cooperation in the completion of the questionnaire which I sent to you through your principal. I realize that it was rather time consuming and that many of the questions may have seemed ambiguous or nonsensical to you. However, they were selected as pertinent to my study for various reasons. Your excellent response has made the data available to me for the analysis and completion of my thesis on the topic The Innovative Teacher's Expectations for the Principal's Supervisory Role.

The results of the analysis and the completed thesis will be available to anyone of you upon my return to Guelph as one copy will be presented to the Wellington County Board of Education for the resource centre and others may be borrowed from me. I hope that your efforts and mine may provide some new knowledge that can be applied to improve the educational environment.

May I again express my sincere thanks for your assistance. I am looking forward to my return to Guelph so that I may once more work with you.

Your colleague,

APPENDIX B

Department of Educational
Administration
The University of Alberta
Edmonton 7, Alberta

February, 1969

Dear Fellow-Teacher:

Please permit me to introduce myself to you and to renew my recent relationships with many others. I am a Guelphite presently attending university in Alberta to obtain my Master of Education degree in the field of Education Administration. The past thirteen years have been spent in Guelph as a teacher and more recently, as a principal at John McCrae Public School. One of the major requirements for graduation this year is the completion of a research project in the area of school administration. My study involves the elementary school teacher and its completion depends largely on your co-operation in the completion of a questionnaire.

This questionnaire involves both personal and professional information - but you are asked not to identify yourself in any way. Accordingly, your personal involvement is entirely limited to answering the questions and returning the information to your principal or another teacher representative. The time involvement will depend upon you and your desire to be thorough and accurate. A minimum of ten or fifteen minutes will be required for completion of the forms.

You cannot know how much your co-operation means to me, but I assure you, that your early completion of the questionnaire will be greatly appreciated. Again I remind you, your responses will mean nothing to anyone, other than to you and me.

May I thank you in advance for this favor. I know you are all at least as busy as I - and therefore I am especially grateful.

APPENDIX B

TEACHER QUESTIONNAIRE

SECTION I PERSONAL AND PROFESSIONAL INFORMATION

Instructions: Please (✓) the response to each item that provides the most accurate information about you.
A response to all items throughout this questionnaire is most important

1. Years of total teaching experience (include this year).

- | | | |
|------------------------------------|-------|----|
| One year or less | _____ | 1. |
| Two to five years | _____ | 2. |
| Six to ten years | _____ | 3. |
| Eleven to fifteen years | _____ | 4. |
| Sixteen to twenty years | _____ | 5. |
| Twenty-one years or more | _____ | 6. |

2. Present level of teacher qualifications.

- | | | |
|--|-------|----|
| Grade 12 plus 2 years | _____ | 1. |
| Grade 12 plus 4 years (B.A.) | _____ | 2. |
| Grade 12 plus 5 years (Cat.V) | _____ | 3. |
| Grade 12 plus 6 years (Cat.VI) | _____ | 4. |
| Beyond Category VI (Dr. etc.) | _____ | 5. |

3. What is your present teaching position?

- | | | |
|---|-------|----|
| Primary - Kindergarten to Gr. 3 level | _____ | 1. |
| Junior - Grade 4 level to Gr. 6 level | _____ | 2. |
| Senior - Grade seven and eight level | _____ | 3. |
| Other - Please specify below | _____ | 4. |

Continued: -

SECTION II UTILIZATION OF RESOURCES

Instructions: (a) In the column at the left please check (✓) each of the following instructional aids, services, and practices that you have used quite regularly (at least twice in terms of aids and services) since September, 1968.

(b) In the column at the right please check (✓) which of the items are not available for your use in your school or in your central resource centre.

Use Made (check)	Items, Services or Practices	Not Available (check)
<input checked="" type="checkbox"/>	Television - ETV. programs, etc. Overhead Projector Tape Recorder Filmstrip or Slide Projector Radio Programs	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Programmed Instructional Aids (machines, texts, etc.) Paraprofessionals or Teacher Aides Clerical Personnel (typists, etc.) Specialists, Consultants, Super- visors (at <u>your</u> request) Student Guidance Services	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Lay Persons (outside speakers, etc.) Transparency-making Equipment Photocopying Machines Resource Units (locally or com- mercially prepared) Filing System of Indexed Teaching Aids	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Team Teaching, Co-operative Teaching Individual Assignments Based on Needs and Interests Regrouping of Students Within the Class Group Provision for Small Group Work Sessions Discovery or Inquiry Method of Instruction	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Other Items (please list and check) _____ _____ _____ _____	<input type="checkbox"/>

Continued: -

SECTION III TEACHER EXPECTATIONS

The items in this part of the questionnaire are expectations which the teacher, principal or superintendent might hold for certain aspects of an elementary school principal's behavior which are desired to assist the teacher to improve his classroom instruction. You are asked to indicate your agreement or disagreement with each of the items. Please do not deliberate - proceed quickly.

DIRECTIONS:

1. Read each item carefully.
2. Decide whether you agree or disagree with the statement.
3. Circle one of the five responses following the item to indicate your reaction to it.

SA - strongly agree

A - agree

U - undecided

D - disagree

SD - strongly disagree

TEACHING AREA VISITATION (CLASSROOM VISITATION)

- | | |
|---|---------------------|
| 1. A principal should visit classes regularly to determine the quality of teaching. | SA A U D SD |
| 2. A principal should visit teaching areas regularly to detect apparent weaknesses with a view of helping the teachers. | SA A U D SD |
| 3. A principal should visit teaching areas frequently, casually. This should be sufficient for him to determine what kind of a job is being done. | SA A U D SD |
| 4. A principal should visit inexperienced teachers more frequently than the experienced teachers. | SA A U D SD |
| 5. A principal should visit teaching areas only upon the invitation of the teachers. | SA A U D SD |

Continued: -

SA-Strongly Agree;A-Agree;U-Undecided;D-Disagree;SD-Strongly Disagree

- | | | | | | |
|--|----|---|---|---|----|
| 6. A principal should be careful not to disturb the teaching area routine | SA | A | U | D | SD |
| 7. If teaching area visits are to be made, the principal should plan the purpose of the classroom visit with the teachers. | SA | A | U | D | SD |
| 8. Teaching area visitation by the principal should be for purposes of co-ordinating the work of all teachers and the school instructional program, generally. | SA | A | U | D | SD |
| 9. While in the room, the principal should suggest experiments or general changes in method where he believes it to be necessary. | SA | A | U | D | SD |
| 10. A principal should acknowledge, to the teacher and the group, his appreciation for the opportunity to visit the teaching area. | SA | A | U | D | SD |
| 11. Following a teaching area visitation, a principal should leave a written summary of his observations with the classroom teacher. | SA | A | U | D | SD |
| 12. A principal should keep a record of all formal classroom visits | SA | A | U | D | SD |

INDIVIDUAL CONFERENCE

- | | | | | | |
|--|----|---|---|---|----|
| 13. A principal should discuss the teacher's performance following a teaching area visit. | SA | A | U | D | SD |
| 14. A principal should arrange a conference following a request for assistance. | SA | A | U | D | SD |
| 15. Following comments by parents or pupils about a teacher (when a specific criticism, complaint, commendation of praise has been given), the principal should discuss this with the teacher concerned. | SA | A | U | D | SD |

Continued: -

SA-Strongly Agree;A-Agree;U-Undecided;D-Disagree;SD-Strongly Disagree

- | | | | | | |
|--|----|---|---|---|----|
| 16. Following tests and evaluation of pupils, a principal should discuss the children's progress with the teachers involved. | SA | A | U | D | SD |
| 17. A principal should confer with a teacher following a demonstration lesson or directed visitation to another "area" within the school or to another school. | SA | A | U | D | SD |
| 18. A principal should arrange pre-teaching conferences, (to help a beginning teacher or a teacher having difficulty, to plan a unit of work, suitable activities, etc.) | SA | A | U | D | SD |
| 19. A principal should counsel teachers on personal as well as professional matters. | SA | A | U | D | SD |
| 20. A principal should help individual teachers to identify, study and take action on problems in their own teaching area. | SA | A | U | D | SD |
| 21. A principal should allow teachers to work out their teacher-pupil problems by themselves. | SA | A | U | D | SD |
| 22. A principal should not do anything to help a teacher who is having difficulties until the teacher comes to him for help. | SA | A | U | D | SD |
| 23. In a fairly large school it is reasonable for a principal to ask teachers to make appointments to see him rather than to come to his office whenever they wish. | SA | A | U | D | SD |
| 24. A principal should hold pre-school conferences (before school opens in September) for orientation purposes. | SA | A | U | D | SD |
| 25. A principal should hold conferences following teaching area visits (discuss a common weakness or neglect of some phase of the instructional program. | SA | A | U | D | SD |

Continued: -

SA-Strongly Agree; A-Agree; U-Undecided; D-Disagree; SD-Strongly Disagree

- | | | | | | |
|--|----|---|---|---|----|
| 26. A principal should arrange follow-up meetings to discuss observed demonstration lessons. | SA | A | U | D | SD |
| 27. A principal should arrange group conferences (i.e. grade level, teams, co-operating teachers). | SA | A | U | D | SD |
| 28. A principal should arrange subject level conferences (i.e. in-service, challenge areas, goal setting). | SA | A | U | D | SD |
| 29. A principal should arrange division (primary, intermediate) level conferences. | SA | A | U | D | SD |
| 30. A principal should hold group conferences to discuss common school problems and specific pupil-related problems. | SA | A | U | D | SD |
| 31. Any group conferences which are to be held should be arranged and organized co-operatively with the teachers where possible. | SA | A | U | D | SD |
| 32. A principal should not feel obligated to consult all teachers on school matters if he can gain a general impression of the views of the staff by consulting only a few teachers. | SA | A | U | D | SD |

GENERAL STAFF MEETINGS

- | | | | | | |
|--|----|---|---|---|----|
| 33. Staff meetings should be planned and directed by the principal. | SA | A | U | D | SD |
| 34. Staff meetings should be planned co-operatively with the staff. | SA | A | U | D | SD |
| 35. The principal should encourage the setting up of staff agenda committees to select, for discussion, problems that are commonly accepted as worthy. | SA | A | U | D | SD |
| 36. A principal should encourage social meetings (to help promote group cohesion). | SA | A | U | D | SD |

Continued: -

SA-Strongly Agree; A-Agree; U-Undecided; D-Disagree; SD-Strongly Disagree

37. A principal should call regular staff meetings even though he may not have anything of importance to discuss with the staff. SA A U D SD
38. A principal should encourage teachers to use and evaluate a variety of instructional methods. SA A U D SD

ACTION RESEARCH

39. A principal should encourage experimentation with new teaching methods SA A U D SD
40. A principal should encourage research activities based on educational problems in the teaching area. SA A U D SD
41. A principal should provide leadership in planning the research study. SA A U D SD
42. A principal should show continued interest and encouragement in the on-going research project. SA A U D SD
43. A principal should assist in the implementation of ideas resulting from the research project. SA A U D SD
44. A principal should permit teachers to adapt courses to the needs of their pupils in whatever way they may see fit. SA A U D SD

BULLETINS AND OTHER AIDS

45. A principal should make available bulletins dealing with current instructional problems and issues. SA A U D SD
46. A principal should issue circulars which summarize staff meetings, results of testing, programs, etc. SA A U D SD
47. A principal should provide the staff with manuals and guides to accompany courses of study. SA A U D SD
48. A principal should select, distribute and promote professional books, magazine articles and research findings. SA A U D SD

Continued: -

SA-Strongly Agree;A-Agree;U-Undecided;D-Disagree;SD-Strongly Disagree

49. A principal should arrange for the procurement and distribution of pamphlets which introduce new teaching materials and audio-visual equipment. SA A U D SD

DEMONSTRATION TEACHING AND SCHEDULED VISITATION

50. A principal should teach demonstration lessons. SA A U D SD
51. A principal should arrange for demonstration lessons to be taught by superior teachers from within the school. SA A U D SD
52. A principal should arrange to have consultants or other central office supervisory personnel teach demonstration lessons. SA A U D SD
53. A principal should arrange to have teachers visit other teaching areas at least once a year. SA A U D SD
54. A principal should arrange for intra-school visitation visits by teachers to other teaching areas in the same school or other schools for purposes of assistance, encouragement, etc., whenever the need arises. SA A U D SD

MISCELLANEOUS

55. A principal should arrange for and encourage his teachers to continue their studies, (i.e. extension, correspondence, summer school). SA A U D SD
56. A principal should study individual children referred to him by the teachers and make the findings available to teachers. SA A U D SD
57. A principal should continuously study factors (organizational, administrative, individual) which might impair learning and report his findings to the staff. SA A U D SD
58. A principal should keep abreast of research and school developments and interpret them to his staff. SA A U D SD

Continued: -

SA-Strongly Agree; A-Agree; U-Undecided; D-Disagree; SD-Strongly Disagree

59. A principal should acquaint teachers with a variety of teaching methods. SA A U D SD

60. A principal need not inform a teacher against whom there has been a parental complaint if he has satisfied the parent who made the complaint. SA A U D SD

61. Teachers should expect principals to deal with all parental complaints before they reach the teachers. SA A U D SD

SECTION IV ORDER OF IMPORTANCE OF MAJOR ITEMS

Please rank these practices in the order that you would prefer to see them used, by an ideal principal, to help a teacher improve his instruction. Place the numeral "1" before the technique which you consider most significant in reference to its helpfulness, the numeral "2" before the technique which you consider second in significance, and so on.

- A _____ Arrange to have demonstration lessons taught by superior teachers, supervisory and/or consultative personnel, etc.
- B _____ Promote individual conferences.
- C _____ Co-ordinate and make provision for general staff meetings.
- D _____ Visit classrooms or teaching areas.
- E _____ Make provisions for inter- and intra-school visitations (i.e. visits to other divisions within the school and/or visits to other schools).
- F _____ Encourage and support staff projects. (i.e. research, experimentation, curriculum planning, evaluation)
- G _____ Arrange group conferences among teachers within the school
- H _____ Make available professional literature, bulletins and other instructional aids.

Continued: -

Other comments - I am most interested to receive your reactions and particularly your ideas relative to principal supervisory activities. Please do not relate these to your principal - but rather consider such comments in the light of the "ideal principal" - unless of course your principal resembles such a myth!

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

Congratulations! And thank you very much.

Please return this questionnaire to your principal or his designate, but do not indicate your identity in any way. This information will be analysed by computer only.

APPENDIX C

T TESTS

VARIABLE	XBAR1	XBAR2	SDEV1	SDEV2	DF	T	P-TWO TAIL
1	2.69	2.19	1.18	1.11	121.	2.272	0.0248594
2	1.95	1.93	0.71	0.95	121.	0.117	0.9068441
3	2.13	2.10	0.99	1.12	121.	0.156	0.8760180
4	2.23	2.01	1.05	1.03	121.	1.082	0.2814278
5	3.92	3.85	0.57	1.05	121.	0.430	0.6681021
6	2.18	2.11	0.93	1.05	121.	0.366	0.7147920
7	2.77	2.96	1.02	1.19	121.	-0.876	0.3826927
8	2.41	2.38	0.95	0.96	121.	0.156	0.8759231
9	2.87	2.73	1.32	1.28	121.	0.577	0.5647665
10	2.41	2.32	1.08	1.15	121.	0.404	0.6868550
11	2.21	2.42	0.82	1.18	121.	-1.005	0.3168374
12	2.44	2.23	0.90	0.98	121.	1.123	0.2633873
13	2.08	1.82	0.62	0.79	121.	1.771	0.0791020
14	1.69	1.55	0.56	0.54	121.	1.348	0.1800724
15	1.87	1.64	1.02	0.70	121.	1.438	0.1528839
16	1.85	1.96	0.58	0.82	121.	-0.802	0.4242392
17	2.87	2.31	0.91	0.74	121.	3.607	0.0004513
18	2.21	1.90	0.85	0.85	121.	1.801	0.0740986
19	4.10	3.96	0.87	1.06	121.	0.704	0.4829686
20	2.33	1.98	0.89	0.64	121.	2.522	0.0129574
21	2.97	3.05	1.02	1.14	121.	-0.339	0.7352771
22	3.74	3.95	0.95	1.00	121.	-1.085	0.2798069
23	3.36	3.37	1.25	1.23	121.	-0.042	0.9666458
24	3.31	2.56	1.22	1.04	121.	3.479	0.0006991
25	2.41	2.31	0.93	0.83	121.	0.598	0.5507701
26	2.69	2.45	0.85	0.82	121.	1.476	0.1424407
27	2.51	2.11	0.84	0.83	121.	2.487	0.0142572
28	2.69	2.32	0.88	0.83	121.	2.236	0.0271493
29	2.62	2.31	0.89	0.86	121.	1.799	0.0745193
30	2.38	1.94	0.99	0.62	121.	2.308	0.0227008
31	1.85	1.68	0.48	0.56	121.	1.599	0.1123841
32	3.64	3.57	1.17	1.17	121.	0.305	0.7605435
33	3.03	3.26	1.17	1.16	121.	-1.043	0.2987125
34	2.49	2.26	0.90	1.02	121.	1.168	0.2452247
35	2.62	2.11	0.95	0.69	121.	3.326	0.0011676
36	3.00	2.40	1.15	1.05	121.	2.814	0.0057175
37	4.44	4.29	0.67	0.80	121.	1.014	0.3126665
38	1.97	1.79	0.48	0.46	121.	2.057	0.0418687
39	1.90	1.61	0.50	0.51	121.	2.930	0.0040461
40	2.28	1.99	0.64	0.75	121.	2.104	0.0374102
41	2.62	2.33	0.87	0.94	121.	1.571	0.1187872
42	1.97	1.88	0.48	0.64	121.	0.801	0.4243876
43	2.28	2.05	0.68	0.65	121.	1.816	0.0718319
44	1.72	1.80	0.60	0.88	121.	-0.507	0.6127447
45	2.00	1.90	0.60	0.55	121.	0.863	0.3897337
46	2.10	2.10	0.63	0.84	121.	0.048	0.9615674
47	1.69	1.76	0.46	0.59	121.	-0.645	0.5202016

VARIABLE	XBAR1	XBAR2	SDEV1	SDEV2	DF	T	P-TWO TAIL
48	2.64	2.37	1.00	0.97	121.	1.418	0.1586545
49	2.05	2.02	0.64	0.82	121.	0.184	0.8542140
50	2.56	2.67	1.17	1.14	121.	-0.457	0.6482654
51	3.33	3.12	1.25	1.19	121.	0.908	0.3656160
52	2.00	2.12	0.88	0.96	121.	-0.654	0.5142480
53	1.92	1.80	0.80	0.75	121.	0.837	0.4038953
54	2.08	1.90	0.94	0.73	121.	1.093	0.2766601
55	2.97	2.80	1.10	1.13	121.	0.807	0.4210938
56	1.92	1.95	0.69	0.77	121.	-0.201	0.8410003
57	2.15	2.19	0.70	0.88	121.	-0.227	0.8208160
58	1.85	1.85	0.43	0.63	121.	0.008	0.9931467
59	1.92	2.02	0.62	0.83	121.	-0.671	0.5036684
60	3.77	4.21	1.19	0.96	121.	-2.190	0.0304113
61	3.82	4.05	1.08	1.01	121.	-1.124	0.2631168

F TEST - DIFFERENCES BETWEEN VARIANCES

VARIABLE	VAR1	VAR2	DF1	DF2	F	P-ONE TAIL
1	1.39	1.23	38.	83.	1.136	0.1548512
2	0.51	0.90	38.	83.	1.763	0.0082076
3	0.98	1.25	38.	83.	1.274	0.0898651
4	1.10	1.06	38.	83.	1.039	0.2158859
5	0.33	1.11	38.	83.	3.381	0.0000009
6	0.87	1.10	38.	83.	1.266	0.0927211
7	1.05	1.42	38.	83.	1.349	0.0647745
8	0.91	0.93	38.	83.	1.019	0.2293428
9	1.75	1.63	38.	83.	1.077	0.1906008
10	1.17	1.31	38.	83.	1.127	0.1599112
11	0.68	1.39	38.	83.	2.051	0.0016924
12	0.81	0.96	38.	83.	1.186	0.1282657
13	0.38	0.62	38.	83.	1.645	0.0153381
14	0.32	0.30	38.	83.	1.068	0.1961229
15	1.03	0.49	38.	83.	2.106	0.0012425
16	0.34	0.68	38.	83.	2.020	0.0020089
17	0.83	0.55	38.	83.	1.517	0.0293324
18	0.73	0.73	38.	83.	1.003	0.2413009
19	0.76	1.13	38.	83.	1.489	0.0336101
20	0.79	0.40	38.	83.	1.945	0.0030415
21	1.05	1.31	38.	83.	1.244	0.1016397
22	0.91	1.00	38.	83.	1.098	0.1773802
23	1.56	1.52	38.	83.	1.030	0.2223145
24	1.50	1.08	38.	83.	1.385	0.0550857
25	0.86	0.69	38.	83.	1.243	0.1023077
26	0.73	0.68	38.	83.	1.073	0.1930448
27	0.71	0.69	38.	83.	1.030	0.2222570
28	0.78	0.69	38.	83.	1.119	0.1645927
29	0.80	0.74	38.	83.	1.086	0.1850459
30	0.97	0.39	38.	83.	2.496	0.0001347
31	0.23	0.31	38.	83.	1.346	0.0655158
32	1.36	1.36	38.	83.	1.004	0.2401857

VARIABLE	VAR1	VAR2	DF1	DF2	F	P-ONE TAIL
33	1.36	1.34	38.	83.	1.017	0.2313747
34	0.81	1.05	38.	83.	1.291	0.0836560
35	0.90	0.48	38.	83.	1.895	0.0040094
36	1.33	1.10	38.	83.	1.214	0.1148075
37	0.45	0.63	38.	83.	1.403	0.0506562
38	0.23	0.22	38.	83.	1.065	0.1981489
39	0.25	0.26	38.	83.	1.067	0.1971933
40	0.41	0.56	38.	83.	1.372	0.0582701
41	0.75	0.89	38.	83.	1.186	0.1283374
42	0.23	0.41	38.	83.	1.801	0.0067098
43	0.46	0.43	38.	83.	1.076	0.1909577
44	0.36	0.78	38.	83.	2.190	0.0007697
45	0.36	0.30	38.	83.	1.195	0.1240070
46	0.40	0.71	38.	83.	1.764	0.0081719
47	0.21	0.35	38.	83.	1.634	0.0162175
48	1.00	0.95	38.	83.	1.055	0.2049458
49	0.41	0.67	38.	83.	1.634	0.0162098
50	1.37	1.29	38.	83.	1.062	0.2002607
51	1.56	1.41	38.	83.	1.100	0.1763049
52	0.77	0.91	38.	83.	1.189	0.1269699
53	0.64	0.57	38.	83.	1.122	0.1631526
54	0.89	0.54	38.	83.	1.655	0.0145147
55	1.20	1.28	38.	83.	1.063	0.1996620
56	0.48	0.59	38.	83.	1.232	0.1068220
57	0.49	0.77	38.	83.	1.581	0.0212921
58	0.18	0.39	38.	83.	2.164	0.0008919
59	0.38	0.69	38.	83.	1.822	0.0059915
60	1.41	0.93	38.	83.	1.514	0.0297526
61	1.17	1.02	38.	83.	1.148	0.1481395

WELCH-T PRIME APPROXIMATION ON VARIABLES

VARIABLE	D.F.	T. PRIME	P-TWO TAIL
1	70.05	2.24	0.0284
2	96.18	0.13	0.8962
3	82.95	0.16	0.8697
4	72.89	1.08	0.2823
5	117.91	0.53	0.5970
6	82.73	0.39	0.7008
7	85.20	0.93	0.3537
8	74.81	0.16	0.8747
9	71.72	0.57	0.5676
10	78.36	0.42	0.6782
11	102.33	1.15	0.2528
12	80.24	1.17	0.2460
13	93.29	1.95	0.0539
14	71.98	1.34	0.1835
15	55.37	1.27	0.2086
16	101.73	0.92	0.3622

VARIABLE	D.F.	T. PRIME	P-TWO TAIL
17	62.16	3.37	0.0013
18	74.25	1.82	0.0732
19	89.18	0.76	0.4478
20	56.82	2.26	0.0277
21	82.05	0.36	0.7232
22	77.41	1.11	0.2690
23	73.19	0.04	0.9667
24	64.44	3.31	0.0016
25	67.39	0.58	0.5641
26	71.83	1.47	0.1461
27	73.18	2.49	0.0149
28	70.51	2.21	0.0304
29	71.46	1.79	0.0783
30	52.62	1.99	0.0521
31	85.13	1.70	0.0924
32	74.30	0.31	0.7589
33	73.61	1.05	0.2976
34	83.46	1.23	0.2210
35	57.32	2.99	0.0041
36	68.06	2.74	0.0079
37	86.77	1.09	0.2801
38	72.07	2.05	0.0440
39	76.39	2.99	0.0038
40	85.89	2.25	0.0272
41	80.23	1.63	0.1062
42	97.05	0.90	0.3717
43	71.74	1.81	0.0750
44	104.91	0.59	0.5584
45	68.53	0.84	0.4024
46	96.20	0.05	0.9572
47	93.02	0.71	0.4794
48	72.38	1.42	0.1611
49	93.02	0.20	0.8398
50	72.17	0.46	0.6498
51	71.06	0.90	0.3713
52	80.32	0.68	0.4981
53	70.44	0.83	0.4111
54	60.14	1.01	0.3183
55	76.26	0.82	0.4131
56	81.67	0.21	0.8338
57	91.65	0.25	0.8044
58	104.45	0.01	0.9925
59	97.53	0.75	0.4535
60	62.20	2.05	0.0447
61	69.73	1.11	0.2729

APPENDIX D

TEACHER ESTIMATED ORDER OF IMPORTANCE OF
EIGHT MAJOR SUPERVISORY PRACTICES

#1 Arranging Demonstration Lessons Taught By Specialists				
Less Innovative Teachers (N=39)			More Innovative Teachers (N=84)	
Rank	Cumulative Frequency (f)	%f	Cumulative Frequency (f)	%f
1	14	35.9	11	13.1
2	18	10.3	22	13.1
3	27	23.1	37	17.9
4	31	10.3	41	4.8
5	32	2.6	50	10.7
6	33	2.6	60	11.9
7	34	2.6	71	13.1
8	39	12.8	84	14.5
Totals	-	Approx. 100	-	Approx. 100
#2 Promoting Individual Conferences				
Less Innovative Teachers (N=39)			More Innovative Teachers (N=84)	
Rank	Cumulative Frequency (f)	%f	Cumulative Frequency (f)	%f
1	2	5.1	2	2.4
2	6	10.3	14	14.3
3	9	7.7	23	10.7
4	14	12.8	31	9.5
5	15	2.6	44	14.5
6	19	10.3	63	22.6
7	32	33.3	74	13.1
8	39	17.9	84	11.9
Totals	-	Approx. 100	-	Approx. 100

#3 Coordinating and Making Provision for General Staff Meetings

Less Innovative Teachers (N=39)			More Innovative Teachers (N=84)	
Rank	Cumulative Frequency (f)	%f	Cumulative Frequency (f)	%f
1	5	12.8	4	4.8
2	8	7.7	8	4.8
3	9	23.6	14	7.1
4	19	25.7	25	13.1
5	24	12.8	39	16.7
6	33	23.1	52	14.5
7	39	15.4	68	19.0
8	39	0.0	84	19.0
Totals	-	Approx. 100	-	Approx. 100

#4 Visiting Classrooms or Teaching Areas

Less Innovative Teachers (N=39)			More Innovative Teachers (N=84)	
Rank	Cumulative Frequency (f)	%f	Cumulative Frequency (f)	%f
1	5	12.8	16	19.0
2	7	5.1	26	11.9
3	12	12.8	34	9.5
4	20	20.5	43	10.7
5	26	15.4	54	13.1
6	33	17.9	69	17.9
7	36	7.7	78	10.7
8	39	7.7	84	7.1
Totals	-	Approx. 100	-	Approx. 100

#5 Making Provisions for Inter- and Intra-School Visitations

Less Innovative Teachers (N=39)	More Innovative Teachers (N=84)
------------------------------------	------------------------------------

Rank	Cumulative Frequency (f)	%f	Cumulative Frequency (f)	%f
1	4	10.3	13	14.5
2	15	28.2	25	14.3
3	22	17.9	34	10.7
4	28	15.4	51	20.2
5	32	10.3	59	9.5
6	36	10.3	67	9.5
7	36	0.0	79	14.3
8	39	7.7	84	6.0

Totals	-	Approx. 100	-	Approx. 100
--------	---	-------------	---	-------------

#6 Encouraging and Supporting Staff Projects

Less Innovative Teachers (N=39)	More Innovative Teachers (N=84)
------------------------------------	------------------------------------

Rank	Cumulative Frequency (f)	%f	Cumulative Frequency (f)	%f
1	2	5.1	29	34.5
2	8	15.4	39	11.9
3	13	12.8	54	17.9
4	15	5.1	61	8.3
5	20	12.8	69	9.5
6	22	5.1	74	6.0
7	26	10.3	82	9.5
8	39	33.3	84	2.4

Totals	-	Approx. 100	-	Approx. 100
--------	---	-------------	---	-------------

#7 Arranging Group Conferences Among Teachers Within The School

Less Innovative Teachers (N=39)			More Innovative Teachers (N=84)	
Rank	Cumulative Frequency (f)	%f	Cumulative Frequency (f)	%f
1	2	5.1	6	7.1
2	5	7.7	21	17.9
3	9	10.3	35	16.7
4	16	17.9	54	22.6
5	23	17.9	68	16.7
6	32	23.1	77	10.7
7	37	12.8	80	3.6
8	39	5.1	84	4.8
Totals	-	Approx. 100	-	Approx. 100

#8 Making Available Professional Literature, Bulletins and Other Aids

Less Innovative Teachers (N=39)			More Innovative Teachers (N=84)	
Rank	Cumulative Frequency (f)	%f	Cumulative Frequency (f)	%f
1	2	5.1	3	3.6
2	8	15.4	12	10.7
3	13	12.8	20	9.5
4	15	5.1	30	11.9
5	20	12.8	38	9.5
6	22	5.1	43	5.9
7	26	10.3	57	16.7
8	39	33.3	84	32.1
Totals	-	Approx. 100	-	Approx. 100

B29929